

SEX ROLE EXPECTATIONS IN CHILDREN'S VOCATIONAL  
ASPIRATIONS AND PERCEPTIONS  
OF OCCUPATIONS

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A Dissertation  
Presented to  
The School of Graduate Studies  
Drake University

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Education

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by  
Mary L. Franken  
August 1976

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An abstract of a Dissertation by

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The Problem. The problem of this study was to determine whether children held sex role expectations in their vocational aspirations and perceptions of occupations. In addition, the differences in responses between boys and girls; between preschool, lower elementary, and upper elementary school children; and between children attending schools in two neighborhoods--one predominantly lower to lower-middle, the other middle to upper-middle class--were calculated and analyzed.

Procedure. A standardized interview procedure was developed for use by a male and a female interviewer with 120 children who were randomly selected from three grade levels from schools representing two socioeconomic levels. Children were asked the questions, "What do you want to be when you grow up?" and "Have you any other ideas about what you might like to do?" The number (variety) of specific occupations mentioned as first and second choices were reported on frequency distributions. Responses were further analyzed in terms of whether the occupations named as aspirations by children were sex-typed, using Chi-square ( $p < .05$ ) to test for independence of the variables of sex, grade level, and socioeconomic level.

A slide-tape presentation depicting thirty actual occupational settings without a worker present was developed for use in the interviews. Children were asked who could do the work in each of the occupations--a woman, a man, or both a woman and a man. Chi-square ( $p < .05$ ) was used to test for independence of sex, grade level, and socio-economic level as factors in sex role expectations in perceptions of occupations.

Findings. Results indicated that sex-typing in vocational aspirations was present both in the number (variety) of occupations named as aspirations by boys and girls and in the way these occupations conformed to traditional sex roles. Boys named 29 different occupations to 25 by girls as aspirations. The number of occupations named by children increased with each higher grade level. No important differences were found in the number of occupations nominated by children from the two socioeconomic levels. Second-choice aspirations concurred with the above trends, but of 120, 49 responses were, "I don't know." A significant relationship (.001) was found between sex-typing of first-choice occupational aspirations and the sex of the respondents. No significant differences in sex-typing of aspirations were found on the variables of grade level and socioeconomic level.

Responses to the slide-tape series were found to be significantly related to the three variables of sex (.01), grade level (.001), and



socio-economic level (.05) of the respondents. A majority of responses of "both" indicated that occupations were perceived as places where both a woman and a man could work. However, both boys and girls excluded women from jobs more than they excluded men from jobs. Girls, more than boys, perceived women as being able to do the work in the occupations. Sex-typing in the perceptions decreased as the grade level of the respondents increased. Responses of children from the lower to lower-middle-class schools revealed more sex-typing than their middle to upper-middle-class counterparts.

Conclusions. Children named a wide diversity of occupational aspirations. It appears that boys begin naming a greater variety of occupations than girls sometime between preschool and second grade. Vocational aspirations tend to be crystallized into single choices for many children, which may indicate a lack of awareness of other vocational possibilities. While children may perceive both a man and a woman as workers in an occupation, boys especially tend to choose jobs for themselves that fall within the usual stereotypes.

Recommendations. Career information experiences should extend to young children, parents, and teachers to encourage them to view occupations as places both men and women can work. Exposure to many opportunities and non-traditional role models is needed by both boys and girls, especially those from the lower to lower-middle class. Inquiries into the effects of career education and the vocational development of children and adults should not neglect the aspect of sex role expectations.

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## Chapter 1

### INTRODUCTION

Career education and greater awareness of sexism in schools and society are two recent trends which have influenced the education of young children. The differential socialization that males and females receive from birth has been related by many to the inequality of opportunities which have existed between the two sexes in education, employment, and in many other aspects of society. Weitzman asserts that "the socialization process shapes the sex roles that men and women come to accept as self-evident."<sup>1</sup>

Over the past two decades theorists in occupational psychology have placed increased emphasis on regarding vocational choice as a developmental process and as an implementation of a person's self-concept. Theorists have related early childhood experiences to vocational choice. Ginzberg included a fantasy period in his theory in which he believed children under age eleven were governed by the wish to be an adult.<sup>2</sup> Roe related parental attitudes and handling of their children to the children's need satisfactions and to their orientation to persons later in life. Roe saw these relationships as being very

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<sup>1</sup>Lenore J. Weitzman, "Sex Role Socialization," Women: A Feminist Perspective, ed. Jo Freeman (Palo Alto, California: Mayfield, 1975), p. 105.

<sup>2</sup>Donald Super, "A Theory of Vocational Development," American Psychologist, VIII (May, 1953), 186.

influential on occupational choice.<sup>1</sup> Childhood experiences play a major role in the theory of Holland.<sup>2</sup> Super's view can be summarized as follows:

The process of vocational development is essentially that of the developing and implementing a self concept; it is a compromise process in which the self concept is a product of the interaction of inherited aptitudes, neural and endocrine make-up, opportunity to play various roles, and evaluations of the extent to which the results of role playing meet with the approval of superiors and fellows.<sup>3</sup>

Hoppock points out that between kindergarten and grade 6 many children announce their vocational intentions. Adults expect that early choices of children will change, and they usually do. Hoppock asserts:

No one wants to urge or even encourage children to make decisive vocational choices before such choices must or should be made, but this does not mean that occupational choices in early childhood should be ignored.<sup>4</sup>

However, Kirchner and Vondracek assert that:

The view that vocational development encompasses the entire life span and entails progression through identifiable stages has been accompanied by scant research on vocational behavior in the preschool years.<sup>5</sup>

In a study which they conducted, they found that aspects of vocational development followed an orderly pattern in early childhood. Also, even

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<sup>1</sup>Rhee Lynn, "Vocational Development and the Elementary School," Developing Careers in the Elementary School, ed. Norman Gysbers (Columbus, Ohio: Charles E. Merrill, 1973), p. 44.

<sup>2</sup>Lynn, p. 46.

<sup>3</sup>Super, p. 189.

<sup>4</sup>Robert Hoppock, Occupational Information (New York: McGraw-Hill, 1967), p. 348.

<sup>5</sup>Elizabeth P. Kirchner and Sarah I. Vondracek, What Do You Want to Be When You Grow Up? Vocational Choices in Children Aged Three to Six, U.S. Educational Resources Information Center, ERIC Document ED 076 244, March, 1973, p. 1.



in the preschool years, significant sex and race differences were evident in vocational behavior. Their findings suggest that a major aspect of vocational development in early childhood is projection into one's future role as an adult, specifically an adult identified vocationally. Their age-related findings suggest an important stage--mastery of the task of projecting oneself as one day achieving adult status--as a precursor to Havighurst's first step in vocational development, occurring at age five, which he calls identification with a worker.<sup>1</sup>

Efforts in career education to provide for more vocational flexibility in a world of rapid vocational change, besides ignoring the importance of the preschool years, also have not recognized "the seriousness of the vocational miseducation of girls."<sup>2</sup> Mitchell believes that attitudes limiting career opportunities, including stereotypes of sex roles, are rooted deep in early childhood.<sup>3</sup> As early as the upper elementary grades, many girls indicate they believe the occupational options open to them are restricted to four: teacher, nurse, secretary, and mother.<sup>4</sup>

Weitzman discusses studies which reveal the differential socialization, treatment and expectations that male and female children receive from parents, teachers, books and the media. Girls are taught to have

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<sup>1</sup>Kirchner and Vondracek, p. 5.

<sup>2</sup>Edna Mitchell, "What About Career Education for Girls?" Educational Leadership, XXX (December, 1972), 233.

<sup>3</sup>Mitchell, p. 233.

<sup>4</sup>Myra Sadker, "Are You Guilty of Teaching Sex Bias?" Instructor, LXXXII (August, 1972), 80.

low aspirations, she believes, because so few opportunities are portrayed as available to them. A study she conducted analyzing picture books revealed the girls' occupational world as consisting primarily of glamour and service.<sup>1</sup> Hartley found men in children's eyes to be active and intelligent while women were seen as a rather tired and unintelligent group.<sup>2</sup> Schlossberg and Goodman conclude that males and females are viewed differently from birth, often in a way suggesting inferiority for women.<sup>3</sup>

The preceding authors assert that girls are taught an expressive, submissive, supporting role while boys are taught an instrumental, dominant, achieving role. If this is true, these patterns, which relate closely to self image, are well underway in preschool and elementary school years and are probably reflected in children's stated aspirations and in perceptions of whether an occupation is open to both sexes.

The tendency to socialize women for expressive rather than instrumental competence has been used as an explanation for the fact that women continue to hold a small percentage of positions in higher professions and fewer leadership roles. Horner believes another factor is that women have a "motive to avoid success."<sup>4</sup> By this she means that they have a

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<sup>1</sup>Weitzman, p. 111.

<sup>2</sup>Weitzman, p. 112.

<sup>3</sup>Nancy K. Schlossberg and Jane Goodman, "A Woman's Place: Children's Sex Stereotyping of Occupations," Vocational Guidance Quarterly, XX (1972), 266-270.

<sup>4</sup>Matina Horner, "The Motive to Avoid Success and Changing Aspirations of College Women," Readings on the Psychology of Women, ed. Judith Bardwick (New York: Harper and Row, 1972), p. 62.

tendency to become anxious about "achieving" because they anticipate or expect negative consequences because of success. Therefore, the ways children are socialized, beginning at birth, have important ramifications in the development of self concept, achievement orientation, and aspirations for the future.

If an individual's stated aspirations and perceptions of occupations are viewed as extensions of his/her value system about the world of work, then these can be considered a part of an individual's total value system and, as such, interrelated with self concept, forming a part of the phenomenal self described by Snygg and Combs.<sup>1</sup> Thus it would be expected that the concepts of self held by an individual would influence and be influenced by his/her role perception. Studying sex role perceptions of children is helpful in understanding their views about self and the world of work.

#### RATIONALE FOR THE STUDY

Researchers in recent years have investigated children's knowledge, aspirations, and perceptions of the world of work. The present study attempted to alleviate some of the criticisms about methodology of previous research. In addition, preschool children were included, making it possible to compare responses of preschoolers with elementary school children.

Fulton developed a comprehensive instrument to study young

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<sup>1</sup>Donald Snygg and Arthur Combs, Individual Behavior (New York: Harper, 1959), p. 43.

children's knowledge and attitudes about work and occupations.<sup>1</sup> But her instrument, like others before it, perpetuated stereotypes because male figures dominated the drawings presented of the occupational settings. She also neglected to report differences between boys and girls in her analyses. This was especially crucial on the scale which sought to compare perceptions of the sex of the worker by children of different ages.

In a recent study, Schlossberg and Goodman used twelve drawings to assess sex-typing of occupations by kindergartners and sixth-grade children.<sup>2</sup> The present study used thirty occupational settings, permitting a wider range of perceptions to be studied. A slide-tape format used photographs of actual occupational settings, lending greater realism. Slides did not show workers present since this could influence children to sex-type an occupation. The methodology tended to eliminate and/or control sex bias in the interview procedure and instrument development, which was often not adequately accounted for in previous research studies.

Since much of the earlier research was conducted before the women's movement and career education programs had their impact on schools and children, the present study permitted a timely look at current perceptions and sex role expectations of occupations held by young children. Unlike other studies which forced children to choose between male and female in their responses, children were given the option to give "both man and woman" as a response.

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<sup>1</sup>Barbara Fulton, "Vocational Development in Children" (unpublished Doctoral dissertation, University of Missouri, Columbia, 1971).

<sup>2</sup>Schlossberg and Goodman, p. 267.

The findings of this study contribute to the growing body of research about vocational development and interests of children and about the effects of sex-typing and sex role expectations on vocational behavior. These are important areas if boys and girls are to be helped to realize their potentials and if they are to perceive a wide variety of vocational choices as being open to them.

#### STATEMENT OF THE PROBLEM

The problem was to determine whether children held sex role expectations in their stated vocational aspirations and in perceptions of occupations. In addition, the differences in responses between boys and girls; between preschool, lower elementary, and upper elementary children; and between children attending schools in two neighborhoods--one predominantly lower to lower-middle class, the other middle to upper-middle class--were calculated and analyzed.

#### HYPOTHESES

Based on the review of related literature, several questions and hypotheses were generated for investigation. It was anticipated that as the ages of the children increased, the total number of occupations named as vocational aspirations would increase for both boys and for girls. It was further hypothesized that sex differences in sex role expectations, both in stated vocational aspirations and in perceptions of occupations, would be present at each of the three age levels included in the study. It was anticipated that boys would name a greater number of occupations as aspirations than girls at each age level. It was also expected that

occupations named as aspirations by boys and girls would be sex-typed.

Both boys and girls were predicted to view occupations along traditional stereotypic roles rather than as neutral places where both females and males could work. It was expected that both boys and girls would exclude women from "men's" jobs more than they exclude men from "women's" jobs and that this would be more apparent in the girls' responses than in the boys' responses. It was further hypothesized that responses from children attending schools in a lower to lower-middle class neighborhood would reveal more sex-typing than the children in the middle to upper-middle income neighborhood schools.

Three questions were posed to investigate the differences in number (variety) of occupations named as aspirations by the subjects in the study:

1. Do boys and girls differ in the number (variety) of occupations named as aspirations?
2. Do children at different grade levels differ in the number (variety) of occupations named as aspirations?
3. Do children of different socio-economic levels differ in the number (variety) of occupations named as aspirations?

The following six null hypotheses were used to test the predictions about sex role expectations in children's vocational aspirations and perceptions of occupations:

1. Sex-typing of children's vocational aspirations is independent of the sex of the respondents.
2. Sex-typing of children's vocational aspirations is independent of the grade level of the respondents.

3. Sex-typing of children's vocational aspirations is independent of the socio-economic level of the respondents.
4. Sex role expectations in children's perceptions of occupations are independent of the sex of the respondents.
5. Sex role expectations in children's perceptions of occupations are independent of the grade level of the respondents.
6. Sex role expectations in children's perceptions of occupations are independent of the socio-economic level of the respondents.

#### ASSUMPTIONS

For the purposes of this study the assumption was made that boys and girls as young as age four have some ideas about possible vocational selections. The assumption was also made that current interests as well as experiences in and out of the home and school might have an effect on stated aspirations and perceptions of occupations. Finally, it was assumed that the children in the sample would be able to express their aspirations and respond to the slide-tape presentation in a one-to-one interview situation.

#### LIMITATIONS

Selection of occupations that were included in the slide-tape presentation was limited by availability of settings for photographing, although still pictures were used in several instances and made into slides. The choices were also limited to occupations with which preschool children could make an association. Findings of the study may only be applicable to populations similar to the sample represented in the study.

## DEFINITIONS

The following definitions were used in the study:

1. Career education. "A sequence of planned educational activities designed to develop positive student attitudes, values, knowledges, and skills toward self and the world of work that will contribute to personal fulfillment in present and future life opportunities as well as economic independence."<sup>1</sup>
2. Career. "Work that can begin to satisfy both individual and social needs."<sup>2</sup>
3. Occupation. "Work that is performed as a task with some rewards based on the personal pride of doing a job well with a sense of social participation."<sup>3</sup>
4. Stereotypes are "assumed differences, social conventions or norms, learned behavior, attitudes, and expectations."<sup>4</sup>
5. Role. A cluster of socially or culturally defined expectations that individuals in a given situation are expected to fulfill.<sup>5</sup>
6. Sex role. The learned behaviors or characteristics that

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<sup>1</sup>State of Iowa, Department of Public Instruction, Models for Career Education in Iowa--Implementing Career Education in the School Curriculum (Des Moines, Iowa: Department of Public Instruction, 1974), pp. 10-11.

<sup>2</sup>Samuel H. Osipow, Theories of Career Development (New York: Appleton-Century-Crofts, 1973), p. 266.

<sup>3</sup>Osipow, p. 266.

<sup>4</sup>Florence Howe, "Sexual Stereotypes Start Early," Saturday Review, LIV (October, 1971), 77.

<sup>5</sup>Janet Saltzman Chafetz, Masculine, Feminine, or Human? (Itasca, Illinois: F. E. Peacock, 1974), p. 3.



have been defined by society as either "masculine" or "feminine."<sup>1</sup>

7. Traditional occupation or role is what is classified as "feminine" or "masculine" according to the major sex represented in that occupation.<sup>2</sup>

8. Sex-typing. Associating an activity or perception with only one sex.

9. Aspiration. "The act of seeking to attain something high or great."<sup>3</sup>

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<sup>1</sup>Chafetz, p. 3.

<sup>2</sup>Schlossberg and Goodman, p. 267.

<sup>3</sup>Webster's New Collegiate Dictionary (Springfield, Massachusetts: G. and C. Merriam Co., 1956), p. 53.

## Chapter 2

### REVIEW OF RELATED LITERATURE

#### INTRODUCTION

Research findings and a summary of the related literature will be presented around the following topics:

1. Theoretical constructs related to psychosexual development.
2. Related research on children's sex roles and sex-typing.
3. Vocational development of young children and effects of sex-typing on their aspirations and attitudes toward occupations.
4. Efforts to combat sexism.

#### THEORETICAL CONSTRUCTS RELATED TO PSYCHOSEXUAL DEVELOPMENT

##### Concepts in Psychosexual Development

One of the most stable aspects of socialization is the learning of sex-appropriate behavior. Acquiring a sex role is a part of a person's psychosexual development. McCandless and Evans refer to psychosexual development as both a product--a set of responses that characterize a person's social and sexual relationships with others--and a process--the way in which one acquires psychosexual characteristics.<sup>1</sup> They define psychosexual development as:

the psychological ways in which one adjusts to his (her)<sup>2</sup>  
biologically defined sex role and learns his (her) sexuality

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<sup>1</sup>Boyd R. McCandless and Ellis D. Evans, Children and Youth: Psychosocial Development (Hinsdale, Illinois: Dryden Press, 1973), p. 229.

<sup>2</sup>Words in parentheses added by this writer.

in the broadest social sense of the term "sexuality." At maturity, such development can be measured in terms of how one behaves with reference to his (her) gender.<sup>1</sup>

Psychologists discuss several important concepts in describing the process of psychosexual development. Sex-typing is the acquisition of behavior associated with male or female sex roles, moving through phases of discrimination, generalization, and performance.<sup>2</sup> Sex-typed behaviors typically elicit different rewards for one sex than for the other. According to social learning theory, the acquisition and performance of sex-typed behavior can be described using the same learning principles as other aspects of a person's behavior.<sup>3</sup>

Sex role identification is the degree to which an individual regards himself/herself as masculine or feminine, though there is little empirical information that deals with the mode of establishment of a child's sex role identity. Kagan speculates that the major determinants of sex role identity for a young child include perceptions of similarity to parents and the degree to which a child adopts the games and learns the skills that are traditionally encouraged for his/her sex.<sup>4</sup> His research using game and toy choices as an index of sex-typed behavior

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<sup>1</sup>McCandless and Evans, p. 229.

<sup>2</sup>Walter Mischel, "A Social Learning View of Sex Differences in Behavior," The Development of Sex Differences, ed. Eleanor Maccoby (Stanford: Stanford University Press, 1966), p. 57.

<sup>3</sup>Mischel, p. 56.

<sup>4</sup>Jerome Kagan, "Acquisition and Significance of Sex-Typing and Sex Role Identity," Review of Child Development Research, Vol. I, eds. M. L. Hoffman and L. W. Hoffman (New York: Russell Sage Foundation, 1964), pp. 137-168.

revealed boys as having an increasing preference with age for sex-appropriate games. For girls, however, Kagan found that many girls between ages 3 and 10 showed a strong preference for masculine games and objects.<sup>1</sup>

Contrasting findings were reported by Looft<sup>2</sup> and Kirchner and Vondracek<sup>3</sup> who found that girls learned earlier than boys that certain adult statuses were not open to them and named more strictly female related preferences.

A third concept, sex role standard, summarizes the culturally approved characteristics for males and females.<sup>4</sup> Characteristics that define male and female have been divided into physical attributes and overt behaviors. Kagan summarizes some of the sex role standards sanctioned by the culture. Desirable qualities that have been stressed for girls included being pretty, small, hairless and having an attractive face, and moderate-sized breasts. Valued characteristics in boys have included being tall, muscular, with body hair. The standard for girls' behavior was to inhibit verbal and physical aggression; to encourage dependency, passivity, and conformity; and to regard affiliative and nurturant behaviors as appropriate. The behavior standard for boys

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<sup>1</sup>Kagan, p. 140.

<sup>2</sup>W. R. Looft, "Sex Differences in the Expression of Vocational Aspirations by Elementary School Children," Developmental Psychology, V (1971), 366.

<sup>3</sup>Elizabeth P. Kirchner and Sarah I. Vondracek, What Do You Want to Be When You Grow Up? U.S., Educational Resources Information Center, ERIC Document ED 076 244, March, 1973.

<sup>4</sup>Kagan, p. 138.

included license and encouragement to express aggression and to develop gross motor and mechanical skills.<sup>1</sup>

One further concept requires clarification. Howe defines sexual stereotypes as "assumed differences, social conventions or norms, learned behavior, attitudes and expectations."<sup>2</sup> Sexual stereotypes are not to be identified with sexual or innate differences. Howe states, "There is still no 'hard' scientific evidence of innate sexual differences, though there are new experiments in process . . . for human beings, at least social factors and pressures are more important than psychological ones."<sup>3</sup> Sex role stereotypes tend to be global, semantically vague, and difficult to examine empirically. They are also widely generalized across diverse situations and remarkably persistent in the thinking of the individuals throughout society.

McCandless and Evans assert that stereotypes clearly affect behavior and are related to the concept of expectancy, particularly expectancies held for a person by others. Differential expectancies are held for children by their parents as early as infancy and thereafter influence the course of psychosexual development.<sup>4</sup>

The impact of social stereotypes has received much recent attention from feminists and proponents of the women's movement. Studies

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<sup>1</sup>Kagan, p. 139.

<sup>2</sup>Florence Howe, "Sexual Stereotypes Start Early," Saturday Review, LIV (October, 1971), 77

<sup>3</sup>Howe, p. 77

<sup>4</sup>McCandless and Evans, p. 231.

confirm that girls have been socialized for an expressive role while boys have learned an instrumental role. As early as 1964 Kagan discussed the implications of the fact that the proportion of women in professional and technical occupations had actually decreased during the last several decades. He suggested that the increasing number of working women did not necessarily reflect a growing tendency for women to assume an instrumental role. Rather, it could reflect the nurturant attitude toward the family since the motivation to work outside the home may be to increase the family income.

Tyler discussed the developmental research of the 1950's and 1960's and the persistent questions, "Why have women's achievements failed to match those of men? Why are there so few outstanding female artists, scientists, and statesmen?"<sup>2</sup> She stressed the need for further research to determine when and how sex roles are learned and the factors which influence this complex learning process.<sup>3</sup>

#### Explanations for the Process of Psychosexual Identification

Four different theoretical sequences have been used to explain the process of psychosexual identification. Freud's classical psychoanalytic is one theoretical model that has affected theorists of development and personality. He saw two processes in identification--first, a

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<sup>1</sup>Kagan, p. 144.

<sup>2</sup>Leona Tyler, "Individual Differences: Sex Differences," International Encyclopedia of the Social Sciences, Vol. VII, ed. David Sills (New York: Macmillan and the Free Press, 1968), p. 208.

<sup>3</sup>Tyler, p. 212.

strong dependency and love relation with the mother and her children, both boys and girls, beginning in infancy. This is the only process or at least the major one for girls. The girl develops her conscience or super-ego to please her mother as her mother's attention is diverted from the growing child. Boys are thought to seek to recapture the mother and to have sexual fantasies about her. The second factor--threat--is the cause for the son to make a defensive identification with his father to avoid castration. Freud postulated a weaker super-ego for women than for men because of the less harsh process which girls go through in identification.<sup>1</sup> This theory has entered into social stereotypes about women and is vigorously rejected by women's groups today.<sup>2</sup>

The Freudian model is perpetuated by some psychiatrists who see women in a submissive role. Weisstein quotes psychologist Bruno Bettelheim:

We must start with the realization that, as much as women want to be good scientists or engineers, they want first and foremost to be womanly companions of men and to be mothers.<sup>3</sup>

Weisstein also cited a biased view of women described by psychiatrist Joseph Rhengold:

. . . when women grow up without dread of their biological functions and without subversion by feminist doctrine and . . . enter upon motherhood with a sense of fulfillment and altruistic sentiment, we shall attain the goal of a good life and a secure world in which to live it.<sup>4</sup>

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<sup>1</sup>McCandless and Evans, p. 233.

<sup>2</sup>McCandless and Evans, p. 233.

<sup>3</sup>Naomi Weisstein, "Women as Nigger," Psychology Today, III (1969), 20.

<sup>4</sup>Weisstein, p. 20.

Cognitive development theory is a second way of looking at psychosexual development. Cognitive theorists emphasize the idea that commonly held social stereotypes define what is masculine and feminine for almost all members of a culture. Consistent with stage theories of development, this view holds that "the natural development of a child's body and role concepts determines the formation of his sex-role attitudes and identifications."<sup>1</sup> This theory stresses universal experiences and views personality as a reflection of age--with typical motives and world views--rather than a reflection of stable, individual personality traits. Lawrence Kohlberg, major proponent of this theory, maintains that the child first develops the idea of himself as a boy or girl, which apparently happens by age two or three, and then perceives those certain attitudes and behaviors that are categorized by that sex type. Last of all, the child begins to adopt those traits associated with that sex, and the labels become a significant part of a child's self-concept. This theory draws upon Piaget's concepts of mental development through experience.

Montemayor discussed the research findings from his study of six to eight-year-olds in terms of Kohlberg's theory. He compared subjects scoring high and low on the IT Scale for Children (ITSC) with another game measure he devised. Montemayor suggested that a child's conception of male and female undergoes considerable change with time

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<sup>1</sup>Lawrence Kohlberg, "A Cognitive-Developmental Analysis of Children's Sex-Role Concepts and Attitudes," The Development of Sex Differences, ed. Eleanor Maccoby (Stanford: Stanford University Press, 1966), p. 155.



and should not be expected to have the same sex role standard as adults. He cited the need for more research to separate the cognitive and motivational factors in sex-typing and questioned the sensitivity of the ITSC as an instrument for the measurement of either differences between or within sexes.<sup>1</sup>

A third theory of psychosexual identification--combination theory--uses interpretations from psychoanalytic and cognitive based concepts. McCandless and Evans quote Lynn:

Parental identification is the internalization of personality characteristics of a given parent and . . . unconscious reactions similar to those of the parent . . . (while) sex role identification refers to the internalization of aspects of the role considered appropriate to a given sex and to the unconscious reactions characteristic of that role.<sup>2</sup>

According to this view, a child could conceivably identify with a cross-sex parent or not identify at all with a parent, yet identify with the appropriate sex role. However, all the following conditions must be considered in the development of both parental and sex role identification:

- 1) Parental preference
- 2) Sex-role preference
- 3) Perceived parental similarity
- 4) Perceived sex-role similarity
- 5) Parental behavior adoption
- 6) Sex-role adoption.<sup>3</sup>

For girls the rationale is that parental and sex role identifica-

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<sup>1</sup>Raymond Montemayor, Children's Performance on and Attraction to an Activity as a Function of Masculine, Feminine, or Neutral Labels on Sex-Role Preference, U.S., Educational Resources Information Center, ERIC Document ED 068 875, 1973.

<sup>2</sup>McCandless and Evans, p. 234.

<sup>3</sup>McCandless and Evans, p. 234.

tion are lessons to be learned, while for boys, they are problems to be solved. Implications about personality have been drawn--conclusions that girls and women would be inferior in problem-solving skills and would have weaker super-egos. The converse would be viewed for boys and men who, while solving their problem of identifying with males also learn the instrumental masculine social role and would at the same time become superior to girls and women in problem-solving and conscience development. These contentions have not been substantiated through research.

A final theory of psychosexual development is a social learning theory based on the principles of modeling and reinforcement. According to Jandt, "Social learning theorists believe that children acquire appropriate sex-role behaviors through the active teaching by parents, peers, and teachers and through imitating the behaviors of these influential persons."<sup>1</sup> Rewards and punishments are administered for appropriate and inappropriate behavior, according to culturally approved standards. Both subtle and overt processes occur in teaching this socialization process.

The social learning view of sex-typing has been supported by many research findings. Studies by Etaugh, Collins and Gerson,<sup>2</sup> Gold and St. Ange,<sup>3</sup> Kagan,<sup>4</sup> and many others lend support to the belief that

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<sup>1</sup>Fred E. Jandt, The Process of Interpersonal Communication (San Francisco: Canfield Press, 1976), p. 105.

<sup>2</sup>Claire Etaugh, Gene Collins, and Arlene Gerson, "Reinforcement of Sex-Typed Behaviors of Two-Year-Old Children in a Nursery School Setting," Developmental Psychology, XI (1975), 255.

<sup>3</sup>Alice R. Gold and Carol St. Ange, "Development of Sex Role Stereotypes in Black and White Elementary School Girls," Developmental Psychology, X (1974), 461.

<sup>4</sup>Jerome Kagan, "The Child's Sex Role Classification of School Objects," Child Development, XXXV (1964), 1051-1056.

children's adoption of sex-typed choices of objects, games, and toys seem to be based on the social learning theory. Howe concludes:

Children learn sexual stereotypes at an early age, and by the time they get to fifth grade, it may be terribly difficult, perhaps hardly possible by traditional means, to change their attitudes about sex roles--whether they are male or female.<sup>1</sup>

Regardless of the process occurring in a child's identity development, a child does identify with some model or role. Seven generalizations in the form of tentative conclusions emerged from the research on identification and sex-typing. McCandless and Evans summarize conclusions in approximately the order of the firmness of the findings:

- 1) Both an awareness and a manifestation of "sex-appropriate" behavior are apparent among children as early as age 3, and most certainly by nearly all children by age 5. In fact some authorities have suggested that the first two years of life represent a "critical period" in sex-typing.
- 2) Boys are more clearly affected by father absence; the earlier in a boy's life his father leaves the home, the more likely will the boy's development be affected adversely. Girls with fathers present are more evenly balanced cognitively. On the whole, for both sexes, but more clearly for boys, social adjustment is better when fathers are in the home.
- 3) Children and young people with appropriate sex-role typing and identification seem on the whole to have better self concepts than those with less appropriate sex-typing.
- 4) Parental warmth and power are both important in determining parental identification. It seems ideal for children's psychosexual development for the parent of the same sex to possess qualities of both warmth and power, although the evidence is clearer for boys than for girls. Boys identify maximally (and here the evidence is clear) with fathers who

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<sup>1</sup>Howe, p. 80.

are loving toward them and who are also powerful in the sense that they exert leadership roles in their marriage and family situations.

- 5) Girls whose mothers identify with them (who are informed about their daughters' interests) identify more closely with their mothers than girls whose mothers are unaware of their interests.
- 6) No really solid evidence has accumulated to indicate that there are general traits of aggressiveness or dependency. Boys, girls, young men, and young women are more reluctant to aggress toward females than toward males, when the aggression takes the form of administering electric shock.
- 7) Appropriate sex-role behaviors are more consistent than inappropriate sex-role behaviors.<sup>1</sup>

Weitzman provides a summary of how the socialization of sex roles progress during the preschool years. First, simple behavioral reinforcement occurs, beginning at birth. Later the child learns the following:

- 1) to distinguish between men and women and between boys and girls, and to know what kinds of behavior are characteristic of each;
- 2) to express appropriate sex-role preferences for himself or herself;
- 3) and to behave in accordance with sex-role standards.<sup>2</sup>

#### RELATED RESEARCH ON CHILDREN'S SEX ROLES AND SEX-TYPING

##### Measuring Sex-Typing and Sex Role Preferences

Various experimental techniques for finding out what young

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<sup>1</sup>McCandless and Evans, pp. 238-240.

<sup>2</sup>Lenore J. Weitzman, "Sex Role Socialization," Women: A Feminist Perspective, ed. Jo Freeman (Palo Alto, California: Mayfield Publishing Co., 1975), p. 109.

children consider the proper sex roles to be and how they relate themselves to them have been devised. These techniques include standardized doll-play situations, the telling of stories about pictures, the choice of toys or activities about pictures, and the choice of toys or activities for a hypothetical boy or girl.

Brown, who defined sex role preference as "behavior associated with one sex or the other that the individual would like to adopt or that he perceives as the preferred or more desirable behavior,"<sup>1</sup> developed an instrument called the IT Scale for Children in 1956 which has been widely used since then as a measure of sex role preference. The scale consists of thirty-six picture cards depicting various objects, figures, and activities commonly associated with masculine or feminine roles. A child-figure drawing, referred to as "It," unstructured as to sex, is used by having each child make choices for "It." The score range of the ITSC is from zero, an exclusively feminine score, to eighty-four, an exclusively masculine score. Brown defended the operational validity of the scale primarily on the assumption that what is socially regarded as, and actually associated with, masculine or feminine behavior is an adequate basis for determining sex role patterns. A test-retest reliability for boys was .71, and for girls, .84. However, Brown himself questioned how much the ITSC taps role preference as much as it does role identification.<sup>2</sup>

In his original study using the ITSC, Brown tested 78 male and

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<sup>1</sup>Daniel G. Brown, "Sex-Role Preference in Young Children," Psychological Monographs, LXX (14, Whole No. 421, 1956), 3.

<sup>2</sup>Brown, p. 8.

68 female middle-class kindergarten children. His findings showed large and significant differences between boys and girls. A number of children in both groups showed a mixed preference pattern. Boys showed a significantly greater preference for the masculine role than girls did for the feminine role. Brown felt the results were evidence for the assumption of greater prestige and value in the male compared to the female role in young children.<sup>1</sup>

Hartop and Zook extended Brown's work with the ITSC by using it with three and four-year-olds with three different sets of verbal instructions being employed. They found four-year-old girls scored more feminine than three-year-old girls; four-year-old boys more masculine than three-year-old boys at a borderline level of significance; girls responded more with feminine scores when "It" was called a girl; and boys responded with more masculine scores when the figure was called by the subject's own name than when the figure was called "It." Their findings imply that the acquisition of sex role preferences by the male is a less complicated developmental process than for the female. The findings also suggest that the ITSC is highly sensitive to variation in the instructions given to the subjects.<sup>2</sup>

The major criticism leveled against the instrument is that "It" actually looks like a boy, rather than a neuter figure. Therefore many children make choices for boys rather than projecting their own choices

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<sup>1</sup>Brown, p. 18.

<sup>2</sup>W. W. Hartop and E. A. Zook, "Sex Role Preference in Three- and Four-Year Old Children," Journal of Consulting Psychology, XXIV (1960), 420-426.

onto "It." There is considerable evidence to support such a criticism.<sup>1</sup> Lansky and McKay eliminated the possible masculine stimulus effect of "It" by testing kindergarten children with the figure concealed in an envelope. They found that boys were more variable than girls in this situation. They also point out the need to devise new measures of sex role identification and preferences because the bipolar assumption between masculinity and femininity is untenable.<sup>2</sup>

Montemayor, who discussed Kohlberg's cognitive theory, disputed the conclusion frequently cited by empirical evidence based on the ITSC that boys have a stronger preference for the male role than girls do for the female role. He gave the ITSC to 263 six to eight-year-old children and chose the top and bottom thirty subjects of each sex for the study to play a game called "Mr. Munchy." He concluded that a mismatch of preference, as indicated on the ITSC, does not necessarily imply a lower motivation to act consistent with the accepted standard but rather could mean that the child has not learned the standard or has learned it in a different form.<sup>3</sup>

The ITSC was also used by Hall and Keith in their study of the relationship between sex role patterns in childhood and the social status of the family to which they belong. Subjects were 88 children, aged 8 to 10. Boys of the lower socio-economic class demonstrated more

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<sup>1</sup>Hartop and Zook, pp. 420-426.

<sup>2</sup>L. M. Lansky and G. McKay, "Sex Role Preference of Kindergarten Boys and Girls: Some Contradictory Results," Psychological Reports, XIII (1963), 421.

<sup>3</sup>Montemayor, p. 14.

clearly masculine sex role preference than boys of the upper class. A similar trend for girls and femininity scores was found, but the difference was not as significant. Boys of both classes revealed more distinctly masculine sex role preference than girls evidenced feminine sex role preference.<sup>1</sup>

Thompson and McCandless further studied the effects of instructions used with the ITSC and added to the normative data for the scale for lower-class Negro and White children. Their sample numbered seventy-two lower-class prekindergarten children. They found race to be an important variable in the responses to the test--many White girls responded to masculine cues in the "It" figure; however, this was not true among Negro girls. Lower-class Negro boys showed greater preference for the feminine role. Thompson and McCandless concluded:

The relationship of the ITSC Scores and the teacher ratings of the children's behavior supported the hypothesis that the development of sex role preference precedes the development of sex role adoption, suggesting that the rate of development may be faster among White boys.<sup>2</sup>

A study to assess the timing and sequence of sex role development and to investigate the relationships among the three aspects of such development was done by Ward. Measures of preference, adoption, and identification were used with the 16 boys and 16 girls in the study

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<sup>1</sup>Marjorie Hall and Robert A. Keith, "Sex Role Preference Among Children of Upper and Lower Social Class," Journal of Social Psychology, LXII (1964), 101-110.

<sup>2</sup>Norman L. Thompson and Boyd R. McCandless, "IT Score Variations by Instructional Style," Child Development, XLI (1970), 425.



who were enrolled in kindergarten through grade two. The ITSC was used as the measure of sex role preference. Results tentatively suggest that sex role preference is established for both sexes by the age of five, sex role identification occurs earlier for girls than for boys, role preference precedes role adoption for both sexes, role adoption and role identification occur together among girls but in sequence among boys, and that the three measures of sex role development were independent.<sup>1</sup> This writer would like to point out that the small sample size of thirty-two should be taken into account when considering the conclusions suggested by Ward.

Biller used a modified ITSC to measure sex role orientation of thirty-four kindergarten boys, matched by pair on the variable of father-absent and father-present. All mothers of kindergarten boys in this school were sent questionnaires to assess father availability and maternal encouragement of masculine behavior. A game preference task was also used with the boys. Biller concluded:

Compared to father-absent boys, father-present boys were found to be much more masculine in projective sex-role identification and slightly more masculine in game preference but were not significantly different in terms of a rating scale measure of overt masculinity. For father-absent boys, but not for father-present boys, degree of maternal encouragement of masculine behavior was related to masculinity of game preference and the rating scale of overt masculinity.<sup>2</sup>

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<sup>1</sup>William D. Ward, "Process of Sex-Role Learning," Developmental Psychology, I (1969), 163-168.

<sup>2</sup>Henry B. Biller, "Father Absence, Maternal Encouragement, and Sex Role Development in Kindergarten-Aged Boys," Child Development, XL (1969), 539.

This writer saw two limitations to this study--the small sample size and the question of whether a paper and pencil questionnaire was a valid way to assess how much mothers actually encouraged masculine behavior.

Thus far, the ITSC as a technique for measuring sex role preference has been discussed as well as criticisms and limitations of its usefulness. Several other techniques have also been used to assess sex role interests.

Sisson studied forty-five children enrolled in Head Start using a self-developed instrument, "The Play Preference Kit," to measure sex role preference behavior and social competence. A tangible miniature preschool featured four "boys' areas" and four "girls' areas," and children were measured as to a degree of sex role orientation (Who plays here?), sex role preference (Where do you want to play?), and sex role adoption (observed in a free play situation with the Play Preference Kit). The percentage of time spent in same- and opposite-sex play areas was calculated, and this percentage was used to delineate the four groups of children. The total social competence scores of the children in the group with 33-49 percent of opposite sex play behavior were statistically significantly higher than the other three groups. These children were characterized as flexible with a good sense of their own gender identity, which did not interfere with their utilization of activities and behaviors stereotyped as typical of the opposite sex when it was appropriate. Children who showed no interest in opposite sex activities were less flexible

and tended to exhibit only sex-typed social competencies.<sup>1</sup>

Recall, knowledge, and preference for masculine and feminine items were tested in 240 American five and eight-year-old boys and girls by Nadelman, who had earlier studied English five-year-olds. Using a recall test, children recalled, knew, and preferred same-sex items more than opposite-sex items. Girls' scores were less rigidly stereotyped than boys'. Older children showed greater stereotyping in preference tests than younger children (confirming ITSC findings). Sex differences scores were greater in the working than in the middle class. In kindergarten, the middle-class children scored higher in knowledge of masculine than feminine items, and this finding was reversed in the working-class children. In comparison, American five-year-olds were less stereotyped than their English counterparts.<sup>2</sup>

Studies which investigated sex role preferences or attitudes in relation to children's vocational aspirations and perceptions of occupations will be discussed later in this chapter.

#### Parents' Influence on Sex Role Identity

The way parents treat children may be the most important factor of all in the creation of sex role stereotypes. "When comparing the treatment of girls to boys, a critical difference emerges: girls are treated more protectively and are subjected to more restrictions and

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<sup>1</sup>Lee Hansen Sisson, "Sex Role Interests and Social Competence in Young Children," Dissertation Abstracts International, XXXIV (1974), 4006 A (University of California-Los Angeles).

<sup>2</sup>Lorraine Nadelman, Sex Identity in American Children: Memory, Knowledge, and Preference Tests. U.S., Educational Resources Information Center, ERIC Document ED 084 029, June, 1973.

controls; boys receive greater achievement demands and higher expectations," according to Frazier and Sadker.<sup>1</sup>

Parents subtly and persistently shape the behavior and feelings of their offspring. The parents' attitudes about the sex of their child are evident before the baby is born, even before conception. It is most often hoped that the first child will be a boy. When fetuses are active, kicking, and moving, mothers are more likely to interpret this as a sign the baby will be a boy. Reporting of the sex is the most dominant information given at birth. All birth announcements provide the sex of the child, and a new parent exclaims, "I have a girl (boy)," not "It's a healthy baby."<sup>2</sup>

Children learn about sex roles early in their lives through relatively simple patterns that most people take for granted. Howe writes:

We throw boy-babies up in the air and coo over girl-babies and handle them delicately. We choose sex-related colors and toys for our children from their earliest days. We encourage the energy and physical activity of our sons, just as we expect girls to be quieter and more docile. We love both our sons and daughters with equal fervor, we protest, and yet we are disappointed when there is no male child to carry on the family name.<sup>3</sup>

A 1971 study by Ban and Lewis concluded that types of parent attachment behavior directed toward infants varies as a function of the infants' sex. They studied infants in their first twelve weeks after birth in their homes, observing parent and infant behavior. They

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<sup>1</sup>Nancy Frazier and Myra Sadker, Sexism in Schools and Society (New York: Harper and Row, 1973), p. 84.

<sup>2</sup>Michael Lewis, "Parents and Children: Sex Role Development," School Review, LXXX (February, 1972), 231.

<sup>3</sup>Howe, p. 76.

classified behavior as proximal (touching, holding, rocking, behavior involving physical contact) or distal (looking at, smiling, vocalizing, behaviors that can be performed at distance). From the earliest age and continuing through the first two years of life, mothers looked at and talked to their girl infants more than their boy infants. The proximal mode was more complex. For the first few months boys received more touching, holding, etc., than girls. However, by age six months this trend had reversed. By six months and for the next year or two, girls received more proximal and distal behavior than boys.<sup>1</sup>

A second study by Lewis had further implications. He observed the free play activities in year-old children and in their mothers. Findings revealed that mothers encouraged boys to move away from the proximal mode at an earlier age than girls. He suggested that there may be a relationship between these early experiences and later adult behavior. He viewed proximal behavior and feeling as a positive valence (without documenting this premise, however) but pointed out that the competitive society does not view them as such and has prevented men from having these qualities. He cited the need for more research on differences between treatment of boys and girls.<sup>2</sup>

A child's sex role learning occurs through direct instruction; observation, insight, and problem-solving; and imitation through identification. From a very early age, imitation is important in the rewards a child receives. McCandless and Evans write:

Other things being equal, imitation or modeling is greatest for models 1) who are like you; 2) who possess characteristics

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<sup>1</sup>Lewis, p. 232.

<sup>2</sup>Lewis, p. 233.

you desire; 3) who have rewarded you in the past; 4) who are accessible and thus provide opportunity for personal association; and 5) who are powerful.<sup>1</sup>

For most children, parents possess much power. They are physically big, control many resources that children want, usually demonstrate expertise in various important aspects of life, and are sources of needed affection and recognition. Because of these factors, parents are generally powerful models for their children. In addition, older siblings, peers, and other adults all have characteristics which children and youth model as they develop and mature.<sup>2</sup>

Parental expectations and attitudes are internalized by their children. Sex role stereotypes are included in these expectations. Mitchell reported a study by Mannes showing that mothers in the United States believed their sons should develop independence, a sense of responsibility, and some vocational role. When working-class and middle-class mothers of preschool children were asked to teach their child a new task, mothers of both classes were more achievement-oriented toward their sons than toward their daughters and adopted a much more businesslike posture toward their sons. Parents in general tend to have higher achievement expectations for their sons.<sup>3</sup> Mitchell went on to say:

Femininity and being female are socially devalued by both sexes. Sexual stereotypes are perpetuated by women, mothers and teachers, as well as by men. Women have been

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<sup>1</sup> McCandless and Evans, p. 238.

<sup>2</sup> McCandless and Evans, p. 238.

<sup>3</sup> Edna Mitchell, "The Learning of Sex Roles Through Toys and Books: A Woman's View," Young Children, XXVIII (1973), 227.

found to be even more condemning than men of women who break out of traditional roles.<sup>1</sup>

Results of an experiment at a college in Maryland reported by Howe showed that boys and girls agreed that "1) boys were not smarter than girls nor girls smarter than boys but 2) daddies were indeed smarter than mommies!"<sup>2</sup> Mitchell believes that girls are torn by their ambivalence about their identification with the female sex role. Girls identify with their mothers but also absorb their mothers' ambivalence about womanhood.<sup>3</sup> Mitchell goes on to dramatize the fact that models in literature present assertiveness and independence as desirable characteristics only for boys. The most frequent model for girls in books is that of passive acceptance of supposedly feminine characteristics of gentleness, resignation, and domestic accomplishment.<sup>4</sup>

Parents need to be aware of the messages conveyed in the books for preschoolers. In many books, little girls are often depicted as being on the ground as boys climb trees, as bringing tools to boys who do the work, and as cleaning up messes and keeping things tidy. In elementary school readers and textbooks, a sister is usually younger than a brother, and girls are fetching or carrying things while boys are making things.<sup>5</sup>

In view of their tremendous impact on the sex role expectations of children, parents need to sharpen their awareness of the various

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<sup>1</sup> Mitchell, p. 227.

<sup>2</sup> Howe, p. 93.

<sup>3</sup> Mitchell, p. 228

<sup>4</sup> Mitchell, p. 229.

<sup>5</sup> Mitchell, p. 230.

subtle mechanisms restricting the healthy development of boys and girls in a world of equality. The earliest treatment of the child, the first toys, the deliberate or careless selection of picture and story books have an immeasurable impact on the psychological growth of boys and girls. A further ramification is that parents are increasingly uncertain what sex-related values they should be conveying to their children. Parents, too, need help in examining and clarifying their own sex role expectations and stereotypes. Weitzman concludes:

In the past, social theorists have assumed that strongly differentiated sex-roles would facilitate a child's identification with the parent of the same sex. For example, Talcott Parsons has commented that "if the boy is to identify with his father there must be discrimination in role terms between the parents." More recently, however, Phillip Slater has argued that adult role models who exhibit stereotyped sex-role differentiation may impede, rather than facilitate, the child's sex-role identification. Children find it easier to identify with less differentiated and less stereotyped parental role models. It is easier for them to internalize parental values when nurturance (the typically feminine role) and discipline (the typically masculine role) come from the same person.<sup>1</sup>

#### Impact of Teachers and Schools on Sex Role Stereotyping

Even though children internalize stereotypes about sex roles long before they enter school, educators have great opportunity to affect the sex role concepts of children. Bernstein believes that schools must assume leadership in changing the sex role stereotypes

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<sup>1</sup>Lenore Weitzman, "Sex-Role Socialization in Picture Books for Pre-School Children," American Journal of Sociology, LXXVII (May, 1972), 1146-1147.



handed down by society.<sup>1</sup> Zach and Price write:

It is difficult to imagine that we can meet the educational needs of all children--a goal repeatedly stated--if these needs are, in part, determined in advance by the sex of the pupil, and by artifactual expectations of his teacher.<sup>2</sup>

Three areas of sex role stereotyping in the public schools were investigated by Saario, Jacklin, and Tittle. Their research documents the extent and kind of sex role stereotyping in the kindergarten to third grade textbooks of four major publishers. The section on educational testing raises the issue of sex bias in item content and language usage and shows the presence of sex role stereotyping in test batteries from major test publishing companies. The curriculum section discusses the presence and ramifications of different curriculum patterns for males and females.<sup>3</sup>

Sadker and Sadker believe that school experiences channel children into sexual stereotypes in a variety of subtle ways. Teachers transfer their expectations in many nonverbal ways to their students.<sup>4</sup> Many educational researchers are also examining the language of the classroom to determine the nature of verbal interaction.<sup>5</sup> O'Donnell

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<sup>1</sup>Jean Bernstein, "The Elementary School: Training Ground for Sex Role Stereotypes," Personnel and Guidance Journal, LI (1972), 97.

<sup>2</sup>Lillian Zach and Michelle Price, The Teacher's Part in Sex Role Reinforcement, U.S., Educational Resources Information Center, ERIC Document ED 070 513, 1973, p. 10.

<sup>3</sup>Terry N. Saario, Carol Nagy Jacklin, and Carol Kehr Tittle, "Sex Role Stereotyping in the Public Schools," Harvard Educational Review, XLIII (August, 1973), 386-416.

<sup>4</sup>Myra Sadker and David Sadker, "Sexism in Schools: An Issue for the 70's," Education Digest, XXXIX (April, 1974), 58.

<sup>5</sup>Sadker and Sadker, p. 59.

writes about sexism in language itself, both written and spoken: "Whether language shapes our culture or culture shapes our language, women have been categorized and stereotyped, and our language helps perpetuate this division between the sexes."<sup>1</sup>

Most of the research on stereotyping of sex roles and expectations of teachers has been done with elementary and secondary teachers. With increasing numbers of children enrolled in preschools and day-care centers, the influence of preschool teachers deserves attention. McCandless and Evans report research conducted on sex role behavior in two nursery schools. They found that sex differences in play behavior exist among three-year-old children. Boys preferred block-building and transportation toys while more girls preferred painting and artwork. Overwhelmingly, children engaged in the preferred activities for their sex. Girls, for example, spent less than 8 percent of their time in "boyish" activities, boys 13.5 percent of their time in "girlish" activities. When a tally was made of how often four women teachers rewarded children for sex-preferred activities, teachers were found to be rewarding both boys and girls for doing things to be feminine in nature. Feminine-preferred behaviors constituted 83 percent of the sex-preferred behaviors that received positive teacher reinforcement (comment favorably, initiate, or join behavior).<sup>2</sup> McCandless and Evans discussed further implications:

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<sup>1</sup>Holly Smith O'Donnell, "Sexism in Language," Elementary English, L (October, 1973), 1067.

<sup>2</sup>McCandless and Evans, p. 236.

In this study, we see the active role played by the peer group in maintaining "appropriate sex-role behavior," to the degree that, for the boys, the peer group overrode the influence of the teachers. . . .

Girls apparently learn feminine stereotypic "sex appropriate" behavior principally through rewards, probably from fathers more than mothers, and certainly from girl peers, teachers, and at least by adolescence, from male peers. The evidence is plentiful that girls do not identify with their gender role as early and perhaps not as firmly as boys. As might be expected (and some evidence supports the expectation), they do identify with their sex-role more congruently than boys, perhaps because their learning occurs more through reward and less through punishment.<sup>1</sup>

A survey of twenty-four prekindergarten teachers was reported by Chasen, who found that teachers seem to resist the implications of stereotyping and that stereotyping did exist in teachers' expectations as well as attitudes. One of the most striking findings was that teachers felt that in the classroom there was equality between girls and boys. But this equality seems to be largely a myth because sex role stereotyping appeared in almost all areas in the classroom.<sup>2</sup>

Lee and Kedar analyzed the interaction between sex role and "pupil role" in the early childhood setting. They postulated that teachers and schools have a demonstrated investment in socializing children to a passive, docile, and dependent role, beginning at the preschool level. They cited studies which indicate this "pupil role" corresponds closely to the traditional female sex role and is incongruent with the standard male sex role. Thus, boys may experience

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<sup>1</sup>McCandless and Evans, pp. 236-237.

<sup>2</sup>Barbara Chasen, "Sex-Role Stereotyping and Prekindergarten Teachers," Elementary School Journal, LXXIV (January, 1974), 233.

conflict and stress in school while girls accommodate to the passive style associated with pupil role.<sup>1</sup>

Studies of teacher behavior and expectations demonstrate that sex role stereotyping is a common occurrence in elementary classrooms, actively reinforcing the sex role stereotypes learned in the home environment. Mulawka, in his study of twenty-eight kindergarten through grade three classrooms, had statistically significant findings--when positively reinforcing children's behavior, teachers did not differentiate between the sexes; when negatively reinforcing children's behavior, teachers used more negative reinforcement patterns with boys than with girls; the teachers did not respond either positively or negatively to crying behavior; teachers didn't differentiate between sexes when assigning work or play activities; and teachers did delegate far more masculine-stereotyped chores to boys than feminine-stereotyped roles to girls when assigning housekeeping tasks.<sup>2</sup>

Letviti and Chananie asked forty female teachers to respond to descriptions of hypothetical male or female students. Their results support the view that teachers promulgate traditional sex-typed behaviors--expecting, encouraging, and rewarding assertiveness in little boys and dependency in little girls. Teachers also liked achieving girls better

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<sup>1</sup>Patrick C. Lee and Gita Kedar, Sex Role and Pupil Role in Early Childhood, U.S., Educational Resources Information Center, ERIC Document ED 100 491, 1974.

<sup>2</sup>Edward John Mulawka, "Sex Role Typing in the Elementary Classroom as Reinforcement of Sex Role Stereotypes Learned at Home," Dissertation Abstracts International, XXXIII (1973), 6472 A (Wayne State University).

than achieving boys.<sup>1</sup>

Kagan's study with 240 second and third-grade-children used a disguised concept transfer to get male-female responses. He taught children nonsense labels to represent a construct. He found that elementary school children, both boys and girls, labeled school objects such as blackboard, book, page of arithmetic, and school desk as feminine rather than neuter or masculine. The findings suggest that superior academic performance of girls in the primary grades may be facilitated by the girls' view of school as congruent with their sex role, whereas boys were more ambivalent.<sup>2</sup>

As boys and girls progress through school, their opinions of boys become higher and correspondingly, their opinions of girls become lower. Grade school boys are convinced it was great to have been born a male while elementary school girls are less enthusiastic about being female.<sup>3</sup> The separation of boys and girls for seating, hanging up coats, the choice of class helpers, and for certain classes calls attention to sex distinctions and sex roles.

The effects of differential treatment by teachers has been discussed in terms of both boys and girls. School is so much a woman's world that it can be hard on some elementary school boys and may seem

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<sup>1</sup>Teresa Letviti and J. D. Chananie, "Responses of Female Primary School Teachers to Sex-Typed Behaviors in Male and Female Children," Child Development, XLIII (December, 1972), 1315.

<sup>2</sup>Jerome Kagan, "The Child's Sex Role Classification of School Objects," Child Development, XXXV (1964), 1051-1056.

<sup>3</sup>Myra Sadker, "Are You Guilty of Teaching Sex Bias?" Instructor, LXXXII (August, 1972), 80.

to have little relevance to them. Bernstein points out that boys are limited by the lack of adult male role models at school--they don't see men playing the role of loving, nurturing teacher of young children.<sup>1</sup>

Stone and Church write:

The accomplishment-oriented role expectations for boys, plus the conflicts in expectations, plus the lack of adequate models, may account for the fact that boys are consistently more prone than girls to minor and major emotional, scholastic, and behavioral problems (although mortality statistics suggest that boys may be biologically more vulnerable than girls).<sup>2</sup>

Studies have demonstrated that boys make up the majority of teachers' behavioral problems and that teachers tend to discipline boys more harshly than girls. A boy may learn that he can get attention and respect from his teachers and peers for nonconforming behavior. Thus, teacher criticism, a seemingly negative response, may actually lead boys toward greater independence, autonomy, and activity.<sup>3</sup> For example, boys, more fidgety in the early grades, tend to have more trouble in controlling this behavior, don't get the rewards girls do for this control, yet later may be freer in their approach to learning.

Schools give girls contradictory messages. Girls are encouraged to be good students, to learn, to perform, to achieve. Yet these same girls are criticized if they are too competitive or take too much pride

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<sup>1</sup>Bernstein, p. 98.

<sup>2</sup>Joseph L. Stone and Joseph Church, Childhood and Adolescence: A Psychology of the Growing Person (New York: Random House, 1968), p. 390.

<sup>3</sup>Betty Levy, "Do Teachers Sell Girls Short?" Today's Education, LXI (December, 1972), 27-29.

in their academic accomplishments.<sup>1</sup> Another example of differential treatment is that teachers tend to grade girls higher even though boys may do as well on achievement tests.<sup>2</sup> However, many people have been unaware of the subtle negative effects schools have had on girls. They fail to realize that girls are being doubly trained--at home and at school--to be docile, dependent, and conforming.<sup>3</sup>

Many materials and books for children also reinforce traditional sex role stereotypes. Mulawka found teachers' displays of pictorial and written materials showed significantly more references to males than females in both wage occupations and leadership roles. These findings were also found in the pictorial contents of textbooks he examined.<sup>4</sup>

Books winning Caldecott Awards and three other groups of children's books were the focus of a study by Weitzman. Her findings suggest that the girls and women depicted in these books are a dull and stereotyped lot. Little girls received attention and praise for their attractiveness, while boys were admired for their achievements and cleverness. Most women in the picture books had status by virtue of their relationships to specific men--they are the wives of the kings, judges, adventurers, and explorers, but they themselves are not found in these roles.

There were no working women in the Caldecott sample. Through

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<sup>1</sup>Bernstein, p. 98.

<sup>2</sup>Margaret Conant, "Learning to Be a Boy, a Girl, or a Person," PTA Magazine, LXVI (1972), 20.

<sup>3</sup>Levy, pp. 27-29.

<sup>4</sup>Mulawka, p. 6472.

books, girls have been taught to have low aspirations because there are so few opportunities portrayed as available to them. The books do not tell girls that as women, they might find fulfillment outside of their homes or through intellectual pursuits. Women are presented as excluded from the world of politics, sports, and science. Their future world is presented as consisting of glamour and service. It is clear that the storybook characters reinforce the traditional sex role assumptions. These books are read over and over at a time when children are in the process of developing their own sexual identities and are most impressionable. Weitzman concludes:

Picture books play an important role in early sex-role socialization because they are a vehicle for the presentation of societal values to the young child. Through books, children learn about what is right and wrong, and they learn what is expected of children their age. In addition, books provide children with role models--images of what they can and should be like when they grow up.<sup>1</sup>

Textbooks in school continue the trend of sex-typing when children reach school age. A task force of the National Organization for Women in Princeton, New Jersey, initiated a two-year study of sex role stereotyping in children's readers. The purpose of the study was to find a reading series which portrayed males and females in a nonstereotyped manner. Despite the fact that task force members read 134 books from twelve different publishers and carefully documented 2,760 stories, no such series was found:

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<sup>1</sup>Weitzman, "Sex-Role Socialization in Picture Books for Pre-School Children," p. 1126.



The ratio of boy-centered stories to girl-centered stories was 5 to 2; the ratio of stories with an adult male character to an adult female character was 3 to 1; the ratio of male biographies to female biographies was 6 to 1. Boys in the stories built and created things and used their wits. Girls rarely appeared in these roles. Boys showed initiative and were strong and brave; girls were rarely depicted as having these characteristics. When a girl mastered a grown-up skill, it was usually a domestic one. Boys were competitive; girls were not. Girls did not act independently; they were smaller and more fearful than boys.

The books showed adult females as jobholders or mothers. Mothers in the stories were colorless, mindless creatures, never shown as having any interests of their own. Fathers on the other hand, were pictured as well-rounded, vibrant adults. It is father who does things with the children, helps them build things, takes them on outings, and solves their problems. Father is the person with whom children have fun.<sup>1</sup>

Jacobs and Eaton discussed the implications for teachers:

Clearly, this is not a fair or balanced picture. As products of a sexist culture, teachers carry with them biases about what boys should be and what girls should be which may be no longer useful. The world into which our children will emerge is different from the conventional stereotype (mother, father, two children, dog and cat, white frame house). We must begin to face this and prepare children for life as it really is.<sup>2</sup>

Primary arithmetic books continue the same trend. Boys are depicted as making things and earning money while girls are shown as cooking or spending money on such things as sewing equipment.<sup>3</sup> In the United States, content analysis studies reveal similar stereotyping in textbooks from elementary schools through high school. Book reviews and protests by parents and teachers are beginning to call the attention

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<sup>1</sup>Carol Jacobs and Cynthia Eaton, "Sexism in the Elementary School," Today's Education, LXI (December, 1972), 20.

<sup>2</sup>Jacobs and Eaton, p. 20.

<sup>3</sup>Conant, p. 19.

of authors and publishers to the slanted material they provide.

School staffing itself is an example of sex role stereotyping. In 1928, 55 percent of the elementary principals were women. In 1971, although women comprised 88 percent of the elementary school teachers, only 22 percent of the principals were women. The fact that only two of the nation's thirteen thousand district superintendents were women<sup>1</sup> is an important evidence of sex-typing.

McClure and McClure effectively summarized the necessity for educators to become more aware of the effects of sex role stereotyping:

Sex stereotyping occurs in the school courses, in the text materials, in the extra-curricular opportunities, in the process of "misguidance," and the very management of school . . . . In an age of accountability we should be deeply concerned over the kind of product, or student, who emerges from our schools. If we allow stereotyping to persist we will have crippled personalities to treat in later years.<sup>2</sup>

### Television's Influence on Sex-Typing

Television, another important educational influence on children, has perpetuated sex role stereotypes. A group of feminist psychologists and educators brought this fact to the attention of a producer of "Sesame Street." Among the unintended learnings being transmitted to preschool children were those about male activity and female passivity. As a consequence, "boys tend to disparage girls and at even greater psychological

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<sup>1</sup>Sadker, "Are You Guilty of Teaching Sex Bias?" pp. 80-81.

<sup>2</sup>John W. McClure and Gail T. McClure, "Cinderella Grows Up: Sex Stereotyping in the Schools," Educational Leadership, XXX (October, 1972), 33.

cost, girls learn to disparage themselves," according to Somerville.<sup>1</sup>

Concrete recommendations were made for eliminating sex role stereotyping in future planned episodes both quantitatively and qualitatively: avoiding showing consideration and concern as being sex linked with girls; introducing counter-stereotypic characters such as a woman architect and research scientist; and portraying the working mother to reflect the realities in children's lives.<sup>2</sup>

Dohrmann studied representative samples of a week of children's television programming, including variety-educational, cartoons, and drama program types. She found that the male sex is the most visible gender symbol in children's television with its 78 percent share of all characters compared to its real life 45 percent share of the population. Moreover, males were most apt to dominate those characterizations of ascribed power or authority, extent of role (lead, major roles), and occupations. Males were more likely to exhibit active, masterful behavior.<sup>3</sup> The implications of her findings about television programming add to the growing realization of the ramifications involved in sex role stereotyping.

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<sup>1</sup>Rose M. Somerville, Introduction to Family Life and Sex Education (Englewood Cliffs, New Jersey: Prentice-Hall, 1972), p. 76.

<sup>2</sup>Somerville, p. 76.

<sup>3</sup>Rita Meade Dohrmann, "Children's Television Programming: A Sex-Socialization Agent," (unpublished Master's thesis, Drake University, 1974), p. 177.

VOCATIONAL DEVELOPMENT OF YOUNG CHILDREN AND EFFECTS  
OF SEX-TYPING ON THEIR ASPIRATIONS AND ATTITUDES TOWARD OCCUPATIONS

Vocational Development of Children

The formation of vocational attitudes and values begins very early in life and seems closely related to vocational choice, according to Fulton, who also pointed out the lack of developmental research in childhood years.<sup>1</sup> She undertook a study to investigate what children know about work at different points in time to see where children were on a developmental continuum. She developed a Career Concepts Inventory for use with 225 children from preschool to grade five to measure how children perceived selected characteristics of the work world. One facet of her study used pictures to investigate knowledge children had about fifteen occupations. Among her conclusions was that:

The older the children the more frequently they answered that both sexes could do most jobs. The preschoolers and first graders perceive more occupations as being exclusively either male or female.<sup>2</sup>

Several criticisms can be made of Fulton's study. She did not report the differences between boys' and girls' responses nor the high degree of stereotyping along traditional sex role lines. The drawings of occupations also included workers pictured that perpetuated traditional stereotypes. One section called "picture absurdities" counted a response as correct if a child chose as unusual or strange a woman

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<sup>1</sup>Barbara Fulton, "Vocational Development in Children" (unpublished Doctoral dissertation, University of Missouri-Columbia, 1971), p. 30.

<sup>2</sup>Fulton, p. 79.

operating a television camera and a man taking dictation.<sup>1</sup> Her summary statement mentioned the tendency with increasing age for children to have a fairly accurate perception of the sex of the workers in different occupations.<sup>2</sup> While children may indeed recognize the occupations usually held by one sex or another, this writer would point to the need for opening choices of occupations to both sexes.

A study by Parker in 1961 investigated the nature of children's concepts of fourteen occupations. He found mean conceptual scores obtained by fourth and sixth-grade children were significantly higher than second-grade means in each of seven occupational areas. He concluded that children appeared to have attained a high level of conceptual understanding of occupations.<sup>3</sup>

Vocational values have been the subject of several research studies. Reporting the results of an investigation between self-concept, sex, and the relationship between these with work values of ninety-nine fifth and sixth-grade children, Hales and Yackee confirm that work values are held by elementary children and that boys and girls differ in some of their work values:

Boys placed greater value than did girls on work which involves manipulation of tools, materials, and utensils, gives the individual supervisory responsibilities, and offers the chance to be known for their work. Boys also placed greater value on jobs which provide an opportunity

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<sup>1</sup>Fulton, p. 146.

<sup>2</sup>Fulton, p. 101.

<sup>3</sup>James Parker, "An Analysis of Children's Concepts of Selected Occupations," Dissertation Abstracts International, XXIV (1964), 3632 (Northwestern University).

to work with ideas and data.<sup>1</sup>

This writer would ask why Hales and Yackee did not report what girls valued.

Cooker used a vocational values inventory with 240 children in grades four, five, and six and found that "boys value such things as money and control more than do girls, while girls are seen to place more importance on altruism and helping others."<sup>2</sup> They found little change in vocational values over the middle elementary school years and made the implication that in order to assure a maximal development of the valuing process, schools cannot wait until the higher grades to aid children in examination of values.<sup>3</sup>

Chaney's findings also suggest an early crystallization of values for many children. He reports sex differences in the expression of values being evident by the fifth grade level:

Consequently, counselors and teachers should be involved in determining the nature of sex differences in vocational values and aiding children in the understanding of sex roles in the culture and in the world of work.<sup>4</sup>

Another conclusion reached was that children from the lower economic communities valued money, job control, and prestige aspects of work more

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<sup>1</sup>Lloyd W. Hales and Keith Yackee, Self-Concepts, Sex, and Work Values, U.S., Educational Resources Information Center, ERIC Document ED 090 459, April, 1974, p. 4.

<sup>2</sup>Phillip G. Cooker, "Vocational Values of Children in Grades Four, Five, and Six," Elementary School Guidance and Counseling, VIII (December, 1973), 116.

<sup>3</sup>Cooker, p. 117.

<sup>4</sup>Reece Chaney, "Vocational Values of Children as They Relate to Economic Community, Grade Level, Sex, and Parental Occupational Level," Dissertation Abstracts International, XXIX (1969), 2957 A (Ohio University).

than their counterparts from higher economic communities. The latter group placed greater value on the self-realization aspects of work.<sup>1</sup>

In comparing child rearing practices of middle and lower-class families and the relationship with self-concept and vocational behavior of sixth-grade children, Atlas found that middle-class student respondents and lower-class student respondents were not significantly different in the relationship they showed between their level of vocational preference and their level of vocational expectation. However, a significantly higher level of vocational preference and vocational expectation was demonstrated by the middle-class children than their lower-class counterparts.<sup>2</sup>

Brook et. al. studied parental aspirations for their children as well as first and fifth-grade children's aspirations. High socio-economic-status children were found to have significantly higher aspirations than the low socio-economic-status children. They also found that children's aspiration levels increased with age:

Whereas among younger children, girls had higher occupational aspirations, there was a reversal among the older children so that fifth-grade boys' aspiration levels were higher than fifth-grade girls' aspiration levels.<sup>3</sup>

Social class differences in aspirations were stronger among the younger

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<sup>1</sup>Chaney, p. 2956.

<sup>2</sup>John Wesley Atlas, "The Influence of Child-Rearing Practices on the Self-Concept and Vocational Behavior of Middle and Lower-Class Children," Dissertation Abstracts International, XXXIV (1973), 563 A (Wayne State University).

<sup>3</sup>Judith S. Brook and others, "Aspiration Levels Of and For Children: Age, Sex, Race, and Socioeconomic Correlates," Journal of Genetic Psychology, CXXIV (March, 1974), 9.

children, whereas sex differences were sharper among older children. Both social class and race were not found to be correlated with parental occupational expectations for their children. Parents' occupational, as well as educational, aspirations were higher for boys than for girls, especially for boys and girls in fifth grade.<sup>1</sup>

The developmental sequences involved in the vocational interests and knowledge of children have been incorporated into Iowa's career developmental model. It was built on the premise that children pass through a series of stages--awareness (kindergarten through grade 3), accommodation (grades 4-6), exploration (grades 7-9), preparation and exploration (grades 10-12), and occupational entry. Activities were designed to develop positive student attitudes, values, knowledges, and skills toward self and the world of work. The school's involvement in career education was regarded as beginning in kindergarten and continuing throughout formal education with alternatives for recycling to obtain further training in adult years.<sup>2</sup>

#### Importance of Occupational Information

Knowledge about occupations and the world of work, understood in relation to self-knowledge, is important if a child is to exercise his/her inherent right to freedom of choice in occupations. Goodson provided background for an elementary level program of occupational information by

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<sup>1</sup>Brook and others, pp. 12-13.

<sup>2</sup>State of Iowa, Department of Public Instruction, Models for Career Education in Iowa (Des Moines, Iowa: Department of Public Instruction, 1973-1975).



conducting individual interviews with 180 children in grades three through eight to learn their concepts of the world of work. The children revealed their interests, knowledge, and attitudes related to various occupations and reasons for working. Some children were quite unaware of work while others were well informed and had specific vocational goals. Her data were used in developing telecasts and other means of presenting occupational information. Interesting findings reported were that younger children appeared to conceptualize occupational functions as activities rather than as work per se (as with community workers), that the younger children tended to remember occupations within their own experience boundaries, and that the greatest proportion of occupations reported were in the service category. The majority of children named an occupation but a few simply said they would get a good job. Children expressed a diversity of interests as well as disinterests--occupations they would definitely not wish to do.<sup>1</sup>

Exposure to an occupational unit increased children's scores on an inventory of vocational knowledge and attitudes in a study reported by Harkness. However, girls' increased knowledge did not influence them to change their choices of future occupations from their initial feminine selections. Boys also continued to select the traditional masculine glamour occupations.<sup>2</sup> Contrasting findings were reported by Bucher,

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<sup>1</sup>Sylvia Goodson, "Children Talk About Work," Personnel and Guidance Journal, XLIX (October, 1970), 131-136.

<sup>2</sup>Carol Harkness, "The Relative Impact of Identified Vocational Development Variables on the Occupational Knowledge and Attitudes of Elementary School Children," Dissertation Abstracts International, XXXIV (1973), 566 A-567 A (University of Virginia).

who demonstrated that presentation of an occupational unit significantly increased students' knowledge of occupations and their preferences for traditional opposite sex occupations as vocational preferences. This held true for both sexes in her study. In addition, as a student's knowledge increased, his or her attitudes toward occupational roles of men and women became less sex role stereotyped.<sup>1</sup>

### Occupational Interests and Aspirations

Sex role preference in relation to children's vocational aspirations has been the topic of several recent studies. Determining the early aspirations of boys and girls was the purpose of a study by Looft in 1971. Thirty-three boys and thirty-three girls, who were first and second-grade pupils in two Catholic parochial schools, were informally asked, "What would you like to be when you grow up?" and secondly, "What do you think you really will do when you grow up, when you are an adult?" Boys named eighteen different occupations, with football player and policeman most frequently named. On the second question, twenty-three boys changed from their initial response to other vocations perceived as desirable. The girls named only a total of eight occupations--twenty-five named either nurse or teacher. Only fourteen girls changed from their original choice on the second question. Looft concluded that girls, especially, learn early that certain adult statuses were open to them and that these were few in number, reflecting a recognition of

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<sup>1</sup>Carol Hope Bucher, "The Impact of a Non-Stereotyped Sex-Role Occupational Unit on Elementary School Children's Occupational Knowledge, Vocational Aspirations, and Expressed Occupational Attitudes," Dissertation Abstracts International, XXXV (1974), 2672 A (University of Virginia).

traditional sex role expectations; none expressed the desire to be a politician, lawyer, or scientist. A few girls said they would be mothers, but no boy said he would be a father.<sup>1</sup> Hewitt's study with Dutch children confirmed Looft's findings that with increasing age, boys perceived job perspectives as broadening while girls responded with just a few alternatives, primarily teaching and nursing.<sup>2</sup>

Swick and Carlton examined occupational interests of kindergarten children and found a wide diversity of interests, indicative of the awareness stage of development. However, they conclude that the choices did not include the breadth of awareness needed in a rapidly changing world of work. No relationship was found to exist between the parents' occupations and the occupational choice of their children. Children chose more leadership-oriented tasks than their parents and were more oriented toward service at this point in their development.<sup>3</sup>

Eight and ten-year-old children differed in their occupational preferences in a study conducted by Brady. He reported differences by socio-economic class, sex, and age. Girls at both ages and from all socio-economic levels in the sample limited themselves much more in their

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<sup>1</sup>Looft, p. 366.

<sup>2</sup>Lynn Stewart Hewitt, "Age and Sex Differences in the Vocational Aspirations of Elementary School Children," Journal of Social Psychology, XCVI (1975), 176.

<sup>3</sup>Kevin J. Swick and Mary Ellen Carlton, "An Examination of Occupational Interests of Kindergarten Children: Implications for Curriculum Development," Reading Improvement, XI (Spring, 1974), 58-61.

range of occupational choice than did the boys. More than half of the girls chose teacher, nurse, or housewife as an occupation.<sup>1</sup> Hahn asked teachers from around the country to collect expressions of students' goals. She received hundreds of responses from kindergarten through grade twelve classes and found that:

an overwhelming majority of females said they wanted to be nurses and teachers. Secretary, stewardess and model ranked next in popularity. . . . Males showed an interest in a greater variety of jobs.<sup>2</sup>

The work of Kirchner and Vondracek filled a much needed void in research about the aspirations of preschool children. As part of a forty-five minute assessment interview, they told 282 three to six-year-old children in Pennsylvania day-care centers, "A (boy, girl) can be all sorts of things when (s)he grows up. What would you like to be when you grow up?"<sup>3</sup> Results were analyzed in terms of number of aspirations mentioned and category of response. The categories for coding the responses were as follows:

- 1) All adult: a category of the following three sub-categories which define its scope:
  - a) Specific occupation
  - b) Adult: nonoccupational adult status, e.g. "be a man"
  - c) Parent
- 2) Older child: attributes of older, bigger children, e.g. "be a Girl Scout," "be taller"

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<sup>1</sup>Robert Paul Brady, "An Examination of Selected Variables Affecting the Vocational Development of Elementary School Children," Dissertation Abstracts International, XXXII (1972), 3682 A (University of Cincinnati).

<sup>2</sup>Carol Hahn, "The Me I Want To Be: Students' Aspirations in the Seventies," Social Education, XXXVIII (April, 1974), 341.

<sup>3</sup>Kirchner and Vondracek, p. 2.

- 3) Same child: response indicative of lack of projection into more mature roles, e.g. "be a boy just like I am"
- 4) Fantasy: fictitious characters or roles no longer present to any significant degree in contemporary society, e.g. Batman, princess, cowboy
- 5) Nonhuman: animal and inanimate objects, e.g. doggie, tiger, and a "bath tub, so I could drink lots of water"
- 6) Other: responses not classified into the preceding categories and not significantly frequent to warrant additional categories.<sup>1</sup>

Major findings of the study can be summarized as follows:

Aspects of vocational development follow an orderly pattern in early childhood. During the preschool years the child comes to project himself into his adult future, to see himself one day as an adult.

Even in the preschool years, significant sex and race differences are evident in vocational behavior. The largest percentage of children gave responses categorized as All Adult and within this category, the mention of a specific occupation was most frequent. The All Adult category increased significantly with age and within the All Adult category, specific occupational aspirations increased markedly. There were decreases with age in Nonhuman, Older Child, and Same Child responses.

Boys and girls equally frequently gave responses classified as All Adult. But boys more often projected themselves in terms of an adult role in general and girls more often projected themselves in terms of the specific role of parent.

Boys' choices were more evenly distributed among occupations, while girls' choices clustered around two occupations--nurse and teacher.

Findings that more frequent Older Child responses by girls and more frequent Fantasy responses by boys supported the notion that girls are more reality bound than boys.

Blacks tended to give fewer responses than Whites in the All Adult category. Within this category, Blacks gave

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<sup>1</sup>Kirchner and Vondracek, p. 3.

fewer Specific Occupation responses and more Adult responses. Blacks also gave more responses in the Same Child and Older Child categories. These findings suggest that the Black children are less mature in their vocational development from the standpoint of mastery of the task of projection into the vocational future.<sup>1</sup>

The research by Kirchner and Vondracek adds support to the belief that the preschool period can be viewed as a bona fide stage in vocational development. During these years the child comes to conceptualize him/herself as one day being an adult and having an occupation. The sex and race differences in the early years suggest that efforts toward achieving equality of vocational opportunity should not neglect the very young.

#### Perceptions of Roles Open to Men and Women

In 1971 and 1972, two studies dealing with sex stereotyping were conducted on school children in three suburbs of Seattle by Iglitzin. In the first study, in which she collaborated with Fiedler, 290 fifth graders took part; in the second, 147 fifth graders (about evenly divided by sex in both studies).<sup>2</sup>

The first study involved a series of questions designed to show sex stereotyping based on views of career and employment patterns, social roles in home and family, and the child's view of his/her future life as an adult. Both boys and girls demonstrated sex stereotyping (as measured

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<sup>1</sup>Kirchner and Vondracek, pp. 4-6.

<sup>2</sup>Lynne B. Iglitzin, "A Child's-Eye View of Sex Roles," Today's Education, LXI (December, 1972), 23-25.

by the response "men" or "women" rather than "either" or "both" to the questions). However, significantly higher proportions of girls had nonstereotyped responses in all categories. Results indicate strong sex role stereotyping by the fifth-grade level;

Career and employment patterns: A majority of both sexes thought that bosses, taxi drivers, mayors, factory workers, and lawyers should be men and that nurses and house cleaners should be women. Stereotyping was common for both boys and girls. In fact, in some cases, girls were even less inclined than boys to see traditionally masculine jobs become feminine jobs. . . . However, girls were more willing to see jobs open to either sex.

Home and family: Fifth graders have been thoroughly inculcated with a sex-typed view of home and household: Women wash dishes, cook, dust, scrub floors and get up at night with a sick child. Men pay bills, fix things, and weed the yard. The men's list was shorter than the women's. . . . though the girls showed a slightly greater tendency to see both parents performing household tasks.

Personality traits: At least 60 percent of the girls saw themselves as kinder, better behaved, more serious, and better in math than boys. . . . The majority of girls saw boys as fighting more and as better in science. The aggressiveness-gentleness continuum offered a striking example of agreement by both sexes: close to 90 percent of boys and girls saw boys as fighting more and about 75 percent of boys and 85 percent of girls saw girls as kinder.

Sextyping in girls' view of the future: The patterns of traditional sex typing carried over into their career aspirations and descriptions of their lives as adults. . . . Girls had varied job and career aspirations, albeit heavily weighted toward traditional female occupations. Only 6 percent said they would simply be a mother or housewife. However, the girls' projected description of a typical day as an adult showed a marked discrepancy between their stated career goals and their descriptions of an actual day. Girls in the sample emphasized marriage and family much more than boys in the sample. . . . Boys tended much more to focus exclusively on details of job and career.<sup>1</sup>

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<sup>1</sup>Iglitzin, pp. 23-24.

One variable that seemed to be relevant in determining which children had less traditional stereotyped views was whether or not their mothers worked outside the home. Iglitzin's data support other findings that children with working mothers--especially girls--had more liberal views on roles of men and women in society.<sup>1</sup> Iglitzin's second study confirmed the sex stereotyping attitudes but did not show a correlation between stereotyping and feminization in the girls as an explanation for their low politicalization scores.<sup>2</sup>

Burgette used a questionnaire to investigate the aspirations and perceptions of future life-styles of 190 fifth and sixth-grade girls. Her findings about girls' emphasis on marriage concur with Iglitzin's. While 65 percent listed a professional occupational chore, 95 percent expected to marry (85 percent of those by age 21). The discrepancies became apparent when looking at the training periods involved and the fact that 50 percent said they would not work after marriage. Burgette suggested that the females' goals could be expanded by encouraging further consideration of occupations they view as exciting but not realistic.<sup>3</sup>

Schlossberg and Goodman studied kindergartners and sixth graders in two elementary schools (the report did not specify the number of children in the sample) to discover the degree to which elementary school

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<sup>1</sup>Iglitzin, p. 24.

<sup>2</sup>Iglitzin, p. 25.

<sup>3</sup>Patricia Roop Burgette, Perceptions of Fifth and Sixth Grade Females of Vocational Goals and Expected Lifestyles, U.S., Educational Resources Information Center, ERIC Document ED 082 068, 1970, pp. 61-62.



children hold stereotypes about occupations based on sex. Children were asked to respond to twelve drawings, representing work settings of six occupations traditionally considered feminine and six traditionally considered masculine. In addition, each child was asked, "What do you want to be when you grow up?"

Data were analyzed in terms of number of stereotyped responses. Their data indicate that there was no appreciable difference in stereotyping between kindergartners and sixth graders; the sixth graders at the model cities school held more stereotypes than those at the middle income school; the children excluded women from men's jobs more than they excluded men from women's jobs; with few exceptions, the children chose jobs for themselves that fall within the usual stereotypes (i.e. most children felt either men or women could be doctors or nurses but the boys all chose to be doctors and the girls, nurses); and there was some disparity between the amount of stereotyping of one occupation and another. The authors concluded that the children's early notions of differential achievement for men and women need to be changed.<sup>1</sup>

#### EFFORTS TO COMBAT SEXISM

Educators have an opportunity and responsibility to challenge and correct the detrimental effects of sex role stereotyping. Levy states:

First they must realize that schools mirror the elitism, racism, and sexism in society. Efforts to change sexism

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<sup>1</sup>Nancy K. Schlossberg and Jane Goodman, "A Woman's Place: Children's Sex Stereotyping of Occupations," Vocational Guidance Quarterly, XX (1972), 266-270.

in schools must be perceived as part of a large and long-range struggle to change the inequalities which schools maintain and perpetuate.<sup>1</sup>

Sweden is one country committed to promoting sexual equality. Through its National Board of Education, Sweden has undertaken the task of re-educating the entire population away from traditional sex role prejudices.<sup>2</sup>

Weeks suggests that parents and teachers should help children develop more flexible role concepts. He recommends consciousness-raising for preschool staffs and parents to discuss stereotypic role models, to examine books and curriculum materials, to include non-traditional role models for young children, and to integrate play areas.<sup>3</sup> Joffe also emphasizes the importance of socialization in nursery schools and the necessity of examining the specific role played by such institutions in sex role socialization.<sup>4</sup>

The schooling of tomorrow's women was discussed by Minuchin, who recommends the following goals or tasks for a school:

Minimization of stereotypes; provision of broad exposure to experiences, ideas, and models; education in skills for choice, problem solving, and evaluation; and enhancement of self-differentiation and self-knowledge.<sup>5</sup>

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<sup>1</sup>Levy, p. 29.

<sup>2</sup>Roger Choates, "Eroding Sex-Role Stereotypes," Times Educational Supplement, May 12, 1972, p. 12.

<sup>3</sup>O'Neal Weeks, A New Look at Children's Sexuality and Sex Role Identification, U.S., Educational Resources Information Center, ERIC Document ED 097 992, April, 1974, pp. 8-9.

<sup>4</sup>Carole Joffe, "Sex Role Socialization and the Nursery School: As the Twig Is Bent," Journal of Marriage and the Family, XXXIII (August, 1971), 467-475.

<sup>5</sup>Patricia Minuchin, "The Schooling of Tomorrow's Women," School Review, LXXX, February, 1972, 200.

Bowman also stresses the importance of models, the quality of model-child relationships, and the need for models to be clear about what they want to model.<sup>1</sup>

Two further suggestions were made by Thetford: including suitable role models representing various life styles in books and exposing occupational opportunities to children from kindergarten to junior high school.<sup>2</sup>

Howe<sup>3</sup> and Levy<sup>4</sup> believe that the most vital force in combatting sexism in the classroom is the teacher. Value clarification strategies and consciousness-raising sessions for teachers and students are helpful in confronting sexist values. In addition to changing classroom practices, teachers should form schoolwide committees to focus on curricular programs and materials, challenge sex-segregated classes and activities, and gather data on hiring and promotion practices and salaries.<sup>5</sup> The Cedar Rapids, Iowa, Community School was one school that significantly changed teacher awareness of sex stereotyping through a series of strategies after receiving a parent complaint about the major reading series being used in 1973.<sup>6</sup>

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<sup>1</sup>Barbara T. Bowman, "Role-Models and Social Change," Childhood Education, LXIX (January, 1973), 180-183.

<sup>2</sup>Mary Thetford, "The Case for the Career Book in Grades Five to Eight: A Feminist View," Elementary English, L (October, 1973), 1059-1060.

<sup>3</sup>Howe, p. 81.

<sup>4</sup>Levy, p. 28.

<sup>5</sup>Levy, p. 29.

<sup>6</sup>Mary Carson, "Action in Cedar Rapids," Today's Education, LXIII (1974), 87.

The Emma Willard Task Force on Education, an active feminist group, published a book of materials relating to sexism in education.<sup>1</sup> Groups like this one are also conducting workshops and inservice meetings with school employees and parents. Many schools are examining policies and practices in light of the implementation of Title IX of the Education Amendments Act of 1972.

Career education, thought by many as a vehicle for equalizing opportunities for boys and girls, may instead be perpetuating sex role stereotyping. A recent publication by the Women on Words and Images reports documentation on the extent to which sex role stereotyping was found in an analysis of more than eighty randomly selected kindergarten-through-grade-twelve and post-secondary career education materials. Secondly, the report offers general advice to teachers and counselors for detecting and counteracting sexism in classroom materials. Third, it presents a checklist for enriching career opportunity awareness. Finally, the report lists organizations and products which are considered to be nonsexist resources.<sup>2</sup>

Mitchell summarizes some recommendations for eliminating sex stereotyping through career education:

- 1) A plan should be developed and implemented in each school for examining the school experience in order to identify the subtle ways in which girls are being restricted in their achievement by sex stereotypes.

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<sup>1</sup>Emma Willard Task Force on Education, Sexism in Education (Minneapolis: Emma Willard Task Force on Education, 1973), pp. 1-87.

<sup>2</sup>Women on Words and Images, Help Wanted, Sexism in Career Education Materials (Princeton, New Jersey: Women on Words and Images, 1975), 5-49.

All teaching materials should be examined for possible sex discrimination and appropriate steps should be taken to eliminate the discriminatory impact of the material.

- 2) Workshops and in-service training sessions for teachers should be designed to focus attention on the pervasiveness of sex stereotyping. Deliberate steps should be presented to sensitize teachers and enable them to avoid repetition of the old patterns of expectancies set for both males and females.
- 3) Change within the curriculum itself should include two aspects: (a) sections about the changing status of women and material from women's studies should be incorporated into the social science curriculum and (b) deliberate techniques should be taught to enable teachers to help girls develop instrumental competency. More attention should be given to girls' use of thought, logic, and problem solving techniques, and less reinforcement should be given to rote memorization and verbal facility. . . .
- 4) Special efforts should be made in the elementary school to draw into the school women who have achieved in various fields--in science, politics, medicine, etc., who are combining serious careers with the role of wife and mother.
- 5) Parent education, focusing on the issue of improving opportunities for the full development of girls' potential, should be sponsored by the school as early as kindergarten.
- 6) High school counselors should be given special professional training for the elimination of discrimination against girls in vocational and educational counseling.<sup>1</sup>

While Mitchell's suggestions refer to lessening sex stereotypes for girls, the importance of freeing boys from rigid sex role stereotypes can also be inferred. Women's liberation will increasingly become

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<sup>1</sup>Edna Mitchell, "What About Career Education for Girls?" Educational Leadership, XXX (December, 1972), 235-236.

a question also of men's liberation. In the words of Neugarten,

The questions are likely to be not only how to equalize opportunities for men and women in all areas of life but how to nurture individual differences in both sexes and increase the rewards of life for all people, no matter how varied their life styles.<sup>1</sup>

#### SUMMARY

Preschool and elementary school children are exploring the type of persons they will become. A learned sex role directs a child's behavior, emotional reactions, cognitive functioning, and general adjustment. Parents, teachers, peers, toys, books, and television are important influences on sex role acquisition and preferences. Sex typing of roles, occupational aspirations, and perceptions of occupations begins at a very young age. Appropriate role models, exposure to occupational opportunities, and elimination of sexist attitudes and practices are needed if both sexes are to be encouraged to develop their interests and abilities in a fast-changing vocational world.

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<sup>1</sup>Bernice L. Neugarten, "Education and the Life-Cycle," School Review, LXXX (1972), 213.

## Chapter 3

### RESEARCH DESIGN AND METHODOLOGY

#### General Design

To determine whether boys and girls at different grade levels and from different socio-economic backgrounds held sex role expectations in their stated vocational aspirations and in perceptions of occupations, a standardized interview procedure was developed for use with children. A slide-tape presentation of thirty occupations was prepared for inclusion in the interviews. Professional colleagues were asked to make suggestions about the interview procedure and the slide-tape series depicting occupations. A pilot trial with six children was conducted to test the procedure, the appropriateness of the tape script, and the wording of the questions. Minor modifications were made before the final taping of the script, which accompanied the photographs of actual occupational settings.

Permission to carry out the study was secured from the administration of a community school district and from the directors of a day care center and private preschool. Since children would not be identified by name, school officials decided that parent permission would not be required. However, an information note was written for teachers to send home with their students (Appendix A).

The sample for the study was comprised of 120 children randomly selected from children attending a preschool, a day care center, and second and fifth grades at two elementary schools. Two training and practice sessions for the male-female interview team preceded the data

collection. Interviews were held during a one-week period six weeks before the end of the 1976 academic year.

A twenty-minute interview with each subject in the sample was held in a private room away from the classroom setting. To control for sex bias, two interviewers, both trained in counseling, worked as a female-male team when they were in each school, though each interviewed subjects individually. Each interviewed half of the boys and half of the girls at each grade level in each school included in the sample. They were trained to use a standardized interview procedure (Appendix B) to ask each child about what he/she wanted to do when he/she grew up.

When the vocational aspiration questions were completed, a slide-tape presentation of occupations was used to elicit children's responses to questions about who could work in each of the thirty occupations described. Children's verbal responses to the questions were written on answer sheets. The data generated by the interview questions and responses to the slide-tape presentation were tabulated and analyzed to answer the questions and test the hypotheses posed for the study.

#### Population and Sample

The population represented by the study included preschool and elementary school aged children from families whose socio-economic level ranged from upper-lower to upper-middle and who resided in suburban areas near medium sized cities or metropolitan areas (75,000-125,000) in mid-western United States.

The sample was selected from an Iowa city which has a population of 30,000 and which includes eight neighborhood schools, two junior high



schools, and one senior high school. It is the site of a four-year college, several light industries, and many business concerns. The city adjoins a larger industrialized metropolitan area which has experienced growth in housing, business, and industry.

Permission to conduct the study in the public schools was granted by the director of elementary education. Only one school in the district was considered to be representative of the lower to lower-middle socioeconomic level; this school was selected for inclusion in the study. The school representing the middle to upper-middle socio-economic level was selected from several possible choices based on the principal's willingness to cooperate. Based on similarity of neighborhood and backgrounds of children attending, a day care center and a preschool were chosen as matches for the elementary schools.

Comparisons can be made about the families whose children attend the two neighborhood schools included in the study. School L (with the L symbolizing the lower to lower-middle level) is located in an area bounded by a mobile home court and homes that can be described as less than affluent. Parents of children attending this school were described by school officials as including many "blue collar" workers. In contrast, School U (with the U symbolizing the middle to upper-middle level) is in a newer area of the city having more affluent homes. Parents were described by school officials as including many "white collar" workers.

Further information about the schools was derived from a fall, 1975, Title I proposal. In describing the concentration of children from low income families, the district average was listed as 6.5 percent, with School L's average at 23.8 percent and School U's at 1.2 percent.

Of 486 children in grades kindergarten through sixth at School L, 103 received free or reduced hot lunches; at School U, the number was only 9 of 386. From October, 1974, to October, 1975, the transfer rates for School L included 14 transfers within the district, 67 to outside the district, and 58 transfers into the school. At School U the transfer data reported were 8 transfers within the district, 32 to outside the district, and 27 into the school. School L was designated as a Title I school.

Teachers in the school district had developed career education materials in 1973 for use in grades kindergarten through grade six.<sup>1</sup> Contributors included teachers from both Schools L and U. Thus it was assumed that children in these schools would have had some exposure to career education concepts. A junior high counselor, assigned to direct the district's career education project, found marked increases in elementary children's career education concepts following a year of career education activities. At the time of the study individual teachers were responsible for any career activities that were incorporated into the curriculum.

Day Care Center L, which will be referred to as Center L, is located directly across the street from School L. It was chosen as a matching center socio-economically, since it serves the same area of the city as School L, with most children attending School L when they reach school age. Financing of this center is through revenue sharing

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<sup>1</sup>Cedar Falls Community Schools, "Career Education in the Elementary Schools" (Cedar Falls, Iowa: Cedar Falls Community Schools, 1973) (Mimeographed).

funds and County Board of Supervisors' support, as well as through private fees. A newly constructed facility, Center L serves fifty children, ranging in age from 2 to 6 and is open from 6:00 a.m. to 6:00 p.m.

Preschool U, while not located in the exact neighborhood of School U, was considered an appropriate match since it serves children whose socio-economic background is similar to the children attending School U. This private preschool is located in an area of newer homes but also draws children from all over the city, with parents transporting their children. The school director described parents as being of middle to upper-middle economic status with a majority of parents employed in white collar occupations. Tuition for the sixty-six children who attend the two and one-half hour afternoon sessions is \$16 a month for twice a week or \$24 a month for three times a week attendance.

The sample for the study was comprised of 120 children--20 from Center L, whose average age was 59 months; 20 from Preschool U, whose average age was 55 months; 40 second graders, half from School L and half from School U, whose average age was 100 months; and 40 fifth graders, half from School L and half from School U, whose average age was 135 months. A random numbers table was used to select the subjects--with an equal number of boys and girls in each age group in each school included in the study--from the 30 four and five-year-olds at Center L, 66 four and five-year-olds at Preschool U, 62 second graders at School L, 56 second graders at School U, 72 fifth graders at School L, and 63 fifth graders at School U.

#### Data and Instrumentation

The data from this study were drawn from children's responses

to a structured interview, which focused on children's vocational aspirations, and from children's responses to a slide-tape presentation depicting thirty occupations.

To learn about the vocational aspirations of children and to determine whether children held sex role expectations in their stated vocational aspirations, children were asked the question, "What do you want to be when you grow up?" This format is similar to other studies investigating the vocational interests and aspirations of children.<sup>1</sup> Interviewers recorded the responses to the question as well as the age, sex, and the socio-economic level designated to the school attended by each subject. In addition, the interviewers asked each child, "Have you any other ideas about what you might want to do?" The answer to this question was also recorded. Including this question made it possible to discover whether children, when given an opportunity, would name more than one occupation. Since career education had been a part of the school curriculum for the older children in the sample, it was considered important to give children an opportunity to name more than one occupation.

Occupations named as responses to the question about what a child would like to do were coded by job title and by whether the occupation

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<sup>1</sup>W. R. Looft, "Sex Differences in the Expression of Vocational Aspirations by Elementary School Children," Developmental Psychology, V (1971), 366; see also Nancy K. Schlossberg and Jane Goodman, "A Woman's Place: Children's Sex Stereotyping of Occupations," Vocational Guidance Quarterly, XX (1972), 266-270; Elizabeth P. Kirchner and Sarah I. Vondracek, What Do You Want to Be When You Grow Up? Vocational Choice in Children Aged Three to Six, U.S. Educational Resources Information Center, ERIC Document ED 076 244, March, 1973, p. 2; Kevin Swick and Mary Ellen Carlton, "An Examination of Occupational Interests of Kindergarten Children: Implications for Curriculum Development," Reading Improvement, XI (Spring, 1974), 58-61.

named was traditionally male, female, or neutral. A second tabulation included other occupations mentioned by children when asked if there were other things they also might like to do.

To determine whether children held sex role expectations in their perceptions of occupations, a slide-tape presentation depicting thirty occupations was developed by this writer. This procedure was a modification of the methodology used in earlier studies of sex-typing of occupations. Schlossberg and Goodman used drawings of twelve occupational settings to assess stereotyping by kindergarten and sixth-grade students.<sup>1</sup> They asked children whether a man could work in the setting pictured and if a woman could work there. Pen and ink drawings of people working were used in Fulton's study on the vocational development of children, which included perceptions about sex role expectations of occupations.<sup>2</sup> Those drawings can be criticized for the way in which they perpetuated sex typing of occupations along traditional lines.

In order to alleviate some of the criticisms of earlier studies, thirty occupations were included in the present study--two representing each of the U.S. Office of Education's 15 occupational clusters.<sup>3</sup> This permitted a greater number and variety of occupations to be depicted than

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<sup>1</sup>Schlossberg and Goodman, pp. 266-270.

<sup>2</sup>Barbara Fulton, "Vocational Development of Children" (unpublished Doctoral dissertation, University of Missouri-Columbia, 1971).

<sup>3</sup>State of Iowa, Department of Public Instruction, Models for Career Education in Iowa, Selected Occupations by Clusters for Use in Elementary Schools (Des Moines, Iowa: Department of Public Instruction, 1974), pp. 2-18.

the 12 in Schlossberg and Goodman's previous study.<sup>1</sup> Actual photographs of occupational settings, showing appropriate materials, tools, machines, or background, lent greater realism for assessing children's perceptions. Unlike Fulton's work, these photographs did not show a worker present which could have influenced a respondent to select the sex of the worker shown as the appropriate choice for an occupation.

In selecting the 30 occupations to be represented in the study, this writer first identified 60 occupations--4 from each of the 15 clusters--that preschool and elementary school children would likely be able to understand and relate to via a slide-tape presentation (Appendix C). Both professional and non-professional occupations were included. A balance was provided between occupations usually engaged in by males and those usually engaged in by females as well as inclusion of less well known occupations with more neutral sex role connotations. Feasibility of taking photographs was another limitation in identifying the pool of 60 occupations.

The 30 occupations in the study were selected from the original 60 identified by this writer. In order to include a balanced representation of occupations considered as traditionally male, as traditionally female, or more neutral, a panel of 10 independent raters was used to do a Q-sort of the 60 occupations. The raters--5 males and 5 females--were professional colleagues of the writer, all of whom had at least a B.A. degree. Each occupation was placed in 1 of 3 categories--as being traditionally male, traditionally female, or neutral (Appendix C). A

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<sup>1</sup>Schlossberg and Goodman, pp. 266-270.

level of 70 percent agreement was designated as a minimum for considering an occupation to be representative of a female, male, or neutral category.

Using occupations where 70 percent or better agreement was reached by raters, 10 which were considered traditionally female, 10 considered traditionally male, and 10 considered neutral were chosen for inclusion in the slide-tape series. Selection was made so that 2 occupations from each of the 15 occupational clusters were included. Appendix C includes the resulting 30 occupations with proportions of rater agreement.

Following the selection of the occupations, an audio tape script was prepared, and photographs of the settings were made into a slide series. Suggestions about the descriptions were made by professional colleagues in order to make sure the wording was appropriate for pre-school and elementary school children. The Occupational Outlook Handbook and Iowa State Department of Public Instruction's career education materials were consulted in writing the narrative descriptions.<sup>1</sup>

Occupations in the slide-tape series were presented in alphabetical order. The wording of the question following the occupational description read, "Who could do the work of a \_\_\_\_\_--a man, a woman, or both a man and a woman?" for half of the occupations depicted. The order was reversed to read "a woman, a man, or both a woman and a man" for the other half of the occupations. The order of the two versions of the question was randomly used in the narration, with half

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<sup>1</sup>U.S. Department of Labor, Bureau of Labor Statistics, Occupational Outlook Handbook (Washington, D.C.: Government Printing Office, 1974); see also State of Iowa, Department of Public Instruction, Models for Career Education in Iowa (Des Moines, Iowa: Department of Public Instruction, 1971-1975).

of the descriptions for each of the 3 categories of occupations--male, female, and neutral--presenting each version. A copy of the tapescript can be found in Appendix D.

A pilot trial with 6 children--a boy and a girl at each of these three age levels--preceded the final taping of the script. The pilot trial gave an opportunity to practice the interview procedure to see whether preschool aged children would be able to respond to the slide-tape presentation and to ascertain the appropriateness of the wording of the script and question, "Who could do the work of a \_\_\_\_\_?" Minor changes in the script were made following the pilot trial. Children at the three grade levels were able to respond to the interview questions and slide-tape presentation.

The audio-tape description that accompanied the slide photographs was taped twice at a university radio and television studio. One tape was made using a female voice and one with a male voice. The interviewers had copies of both tapes so that half of the girls and half of the boys at each grade level from each school heard the tape with the female voice while the other half heard the tape with the male voice.

Instructions and a trial sample were provided to introduce the slide-tape series, which was presented on a Singer Caramate machine. Then the 30 occupational settings were shown and described. The tape was stopped after each description to write down the subject's response to the question, "Who could do the work of a \_\_\_\_\_--a woman, a man, or both a woman and a man?" A child could have as much time as needed in responding and could choose "I don't know" as an option. The interviewers wrote down the responses to each slide in one of four



categories--man, woman, both, or don't know--for later tabulation and analysis.

### Analysis

The questions and hypotheses postulated for this study related to children's sex role expectations in stated vocational aspirations and in perceptions of occupations and the relationship, if any, that could be attributed to sex, grade level, and socio-economic level of the subjects.

The first three questions investigated in the study were as follows:

1. Do boys and girls differ in the number (variety) of occupations named as aspirations?
2. Do children at different grade levels differ in the number (variety) of occupations named as aspirations?
3. Do children of different socio-economic levels differ in the number (variety) of occupations named as aspirations?

To answer the preceding questions, children's responses to the interview questions, "What do you want to be when you grow up?" and "Have you any other ideas about what you might want to do?" were reported and compared. Frequency distributions were used to report the occupations named as aspirations by each sex, at each grade level, and in each of the two socio-economic levels. The total numbers of specific occupations mentioned by children of each sex at each grade level from each of the two socio-economic levels were tabulated.

Responses were further analyzed in terms of whether the occupations named as aspirations by boys and girls were sex-typed. A child's response was considered sex-typed when the occupation mentioned as an

aspiration was traditionally reserved for his/her sex. Occupations named were classified into categories of traditionally male, female, or neutral in keeping with the rater classifications used in selecting occupations for the slide series in the study. Bergmann and Adelman define "women's" and "men's" occupations as those where the sex has been over-represented in terms of numbers of workers employed.<sup>1</sup> Schlossberg and Goodman also classified occupations as "feminine" or "masculine" according to the major sex represented in the occupation.<sup>2</sup> The null hypotheses tested were as follows:

1. Sex-typing of children's vocational aspirations is independent of the sex of the respondents.
2. Sex-typing of children's vocational aspirations is independent of the grade level of the respondents.
3. Sex-typing of children's vocational aspirations is independent of the socio-economic level of the respondents.

Responses to the thirty slide-tape presentation questions, "Who could do the work of a \_\_\_\_\_?" were tabulated for each subject, calculating the number of times a respondent chose "man," "woman," "both," and "don't know." Totals were calculated for analysis by sex, grade level, and socio-economic level of the respondents. The following null hypotheses were tested:

4. Sex role expectations in children's perceptions of occupations

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<sup>1</sup>Barbara R. Bergmann and Irma Adelman, "The 1973 Report of the President's Council of Economic Advisors: The Economic Role of Women," The American Economic Review, LXIII (September, 1973), 510-511.

<sup>2</sup>Schlossberg and Goodman, p. 267.

are independent of the sex of the respondents.

5. Sex role expectations in children's perceptions of occupations are independent of the grade level of the respondents.

6. Sex role expectations in children's perceptions of occupations are independent of the socio-economic level of the respondents.

Chi-square was chosen as the appropriate statistic for determining independence in testing for significance in hypotheses 1-6 because of its additive property and usefulness with discrete data in the form of frequencies. A Chi-square significant at the  $p = .05$  level was considered adequate to reject a null hypothesis. The computational formula for Chi-square is as follows:<sup>1</sup>

$$\chi^2 = \sum \left[ \frac{(f_o - f_e)^2}{f_e} \right]$$

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<sup>1</sup>J. P. Guilford and Benjamin Fruchter, Fundamental Statistics in Psychology and Education (New York: McGraw-Hill, 1973), p. 199.

## Chapter 4

### FINDINGS

Interviews with 120 children enrolled in preschool, second grade, and fifth grade were held to determine whether children held sex role expectations in their vocational aspirations and in their perceptions of thirty occupations presented via a slide-tape series.

The first questions of the study investigated whether the number (variety) of occupations named by children differed on the variables of sex, grade level, and socio-economic level of the respondents.

Occupations named as first-choice vocational aspirations by sixty boys are shown in a frequency distribution in Table 1. Boys named a total of 29 different occupations. Three preschool boys answered "I don't know" to the question about vocational aspirations. Table 2 shows a comparison of the boys' choices by grade level and economic level. The number of different occupations named as aspirations increased from 8 at the preschool level to 12 at grade two and 15 at grade five. Data from Table 2 do not reveal any definitive trends in the numbers of occupations named by children of the two socio-economic levels.

Table 3 shows the frequency distribution of occupations named as first-choice vocational aspirations by sixty girls. Girls named a total of 25 different occupations with the breakdown by grade level and socio-economic level indicated in Table 4. Seven girls gave "I don't know" as a response. Preschool girls named 9 different occupations as first-choice aspirations, second graders named 10 occupations, and fifth graders named 12 occupations.

Table 1

Frequency Distribution of Boys' First-Choice Occupations Named As Vocational Aspirations By Grade Level and Socio-Economic Level

Occupation	Classification into Male, Fe- male or Neutral	Preschool		Grade 2		Grade 5		Total Subjects Choosing
		Upper	Lower	Upper	Lower	Upper	Lower	
1. Truck Driver	M	1	2		1	1	1	6
2. Policeman	M	4		1	1	3		9
3. Fireman	M	1	3		3			7
4. Doctor	M	1	1					2
5. Train Engineer	M		1					1
6. Football Player	M		1					1
7. Run Doughnut Shop	N		1					1
8. John Deere Worker	M		1	1	2			4
9. Race Car Driver	M			2				2
10. Cement Worker	M			1				1
11. Basketball Player	M			1				1
12. Welder	M			1	2			3
13. Electrician	M			1				1
14. Gas Station Attendent	M			1				1
15. Store Manager	M			1				1
16. Rancher	M				1			1
17. Mechanic	M					1		1
18. Scientist	N					1		1

Table 1 (Continued)

Occupation	Classification into Male, Fe- male or Neutral	Preschool		Grade 2		Grade 5		Total Subjects Choosing
		Upper	Lower	Upper	Lower	Upper	Lower	
19. Grocery Carry Out	M					1		1
20. Lawyer	M					1	1	2
21. Pharmacist	M					1		1
22. Bowling Alley Manager	M					1		1
23. Pilot	M						2	2
24. Baby Sitter	F						1	1
25. Farmer	M						1	1
26. Preacher	M						1	1
27. Marine Biologist	N						1	1
28. Detective	M						1	1
29. Motor Cycle Racer	M						1	1
Don't Know	-	3						3
Totals		10	10	10	10	10	10	60

Table 2  
Number of Different Occupations Named As  
First-Choice Aspirations By Boys

Grade Level	Socio-Economic Level		Total *	Don't Know
	Upper	Lower		
Preschool	4	7	8	3
Grade 2	9	6	12	0
Grade 5	8	9	<u>15</u>	<u>0</u>
Totals			29	3

\* Totals reflect overlap in responses made by respondents at the two socio-economic levels.

Table 5 shows the comparison of responses by boys and girls at the two socio-economic levels. The 30 girls from upper socio-economic level schools named 16 different occupations, while the 30 girls from lower socio-economic level schools named 13 different occupations. This compared with 18 different occupations that were named as first-choice aspirations by the 30 boys at each of the two socio-economic levels. While the trend is not a large one, boys at both socio-economic levels named a greater number of occupations as aspirations than did girls.

With boys of the two levels nominating equal numbers (18) of occupations as aspirations, girls from the upper socio-economic level nominating 16, and girls from the lower socio-economic level naming 13, any trends indicated by this study on the variable of socio-economic level seem to be small and applicable to girls only.

Table 3

Frequency Distribution of Girls' First-Choice Occupations Named As Vocational Aspirations By Grade Level and Socio-Economic Level

Occupation	Classification into Male, Fe- male or Neutral	Preschool		Grade 2		Grade 5		Total Subjects Choosing
		Upper	Lower	Upper	Lower	Upper	Lower	
1. Nurse	F	2	2	5	2	1	2	14
2. Ballerina	F	1						1
3. Bike Rider	N	1						1
4. Letter Writer	N	1						1
5. Mother	F	2	1					3
6. Truck Driver	M		1					1
7. Horse Trainer	M		1		2		1	4
8. Cowgirl	F		1					1
9. Wonderwoman	F		1					1
10. Dairy Store Worker	N			1				1
11. Artist	N			2				2
12. Deputy of the Court	N			1				1
13. Veternarian	M			1	1		3	5
14. Teacher	F				2	1	1	4



Table 3 (Continued)

Occupation	Classification into Male, Fe- male or Neutral	Preschool		Grade 2		Grade 5		Total Subjects Choosing
		Upper	Lower	Upper	Lower	Upper	Lower	
15. Maid	F				1			1
16. Storekeeper	N				1			1
17. Housewife	F				1			1
18. Interior Designer	N					1		1
19. Airline Stewardess	F					2		2
20. Lawyer	M					2		2
21. Beautician	F					1		1
22. Secretary	F					1		1
23. Gymnast	N					1		1
24. Orthodontist	M						1	1
25. Doctor	M						1	1
Don't Know	-	3	3				1	7
Totals		10	10	10	10	10	10	60

Table 4

Number of Different Occupations Named As  
First-Choice Aspirations By Girls

Grade Level	Socio-Economic Level		Total*	Don't Know
	Upper	Lower		
Preschool	5	6	9	6
Grade 2	5	7	10	0
Grade 5	8	6	<u>12</u>	<u>1</u>
Total			25	7

\*Totals reflect overlap in responses made by respondents at the two socio-economic levels.

Table 5

Comparisons of the Numbers of Different Occupations  
Named As First-Choice Aspirations By Children  
Attending Two Socio-Economic Level Schools

Sex of Respondents	Socio-Economic Level		Total Number of Occupations Named*
	Upper	Lower	
Girls	16	13	25
Boys	18	18	29

\*Totals reflect overlap in responses made by respondents at the two socio-economic levels.

Children were also given an opportunity to give a second choice to the question about what they would like to be when they grow up. Boys' second choices are listed on a frequency distribution in Table 6. The boys named a total of 20 occupations, with 23 responding, "I don't know."

Table 6

Frequency Distribution of Boys' Second-Choice Occupations Named As Vocational Aspirations By Grade Level and Socio-Economic Level

Occupation	Classification into Male, Fe- male or Neutral	Preschool		Grade 2		Grade 5		Total Subjects Choosing
		Upper	Lower	Upper	Lower	Upper	Lower	
1. Tractor Shovel Operator	M	1						1
2. Policeman	M	1	2	2	1			6
3. Service--Army, Navy or Marine	M	1					2	3
4. What My Dad Is	M		1					1
5. Cartoonist	N			1				1
6. Truck Driver	M			3	1	1		5
7. Football Player	M			1	1	1		3
8. Electrician	M			1				1
9. Pilot	M			1	1			2
10. Garbage Collector	M				1			1
11. Fireman	M				1			1
12. John Deere Worker	M	1			1	1	1	4

Table 6 (Continued)

Occupation	Classification into Male, Fe- male or Neutral	Preschool		Grade 2		Grade 5		Total Subjects Choosing
		Upper	Lower	Upper	Lower	Upper	Lower	
13. Construction Worker	M					1		1
14. Coach	M					1		1
15. Engineer	M					1		1
16. Race Car Driver	M						1	1
17. Carpenter	M						1	1
18. Detective	M						1	1
19. Utilities Worker	M						1	1
20. Computer Worker	N						1	1
Don't Know	-	6	7	1	3	4	2	23
Totals		10	10	10	10	10	10	60

Table 7 indicates the breakdown by grade level and by socio-economic level. A total of 5 different occupations were named as second-choice aspirations by the preschoolers, 9 by second graders, and 12 by fifth graders.

Table 7

Number of Different Occupations Named As  
Second-Choice Aspirations By Boys

Grade Level	Socio-Economic Level		Total*	Don't Know
	Upper	Lower		
Preschool	4	2	5	13
Grade 2	6	7	9	4
Grade 5	6	7	<u>12</u>	<u>6</u>
Total			20	23

\* Totals reflect overlap in responses made by respondents at the two socio-economic levels.

Table 8 summarizes the girls' second-choice occupations named as aspirations. The sixty girls named a total of 15 different occupations. Twenty-six girls gave "I don't know" as a response. Table 9 shows that preschool girls named 5 different occupations as second-choice aspirations, second graders named 7, and fifth graders named 9.

Table 10 shows the comparisons in the total numbers of occupations named as second-choice aspirations by children attending the two socio-economic level schools. Girls from upper socio-economic level schools named 10 occupations to 8 by the girls from lower socio-economic level schools. Boys at the upper level schools named 12 occupations, while boys

Table 8

Frequency Distribution of Girls' Second-Choice Occupations Named As Vocational  
Aspirations By Grade Level and Socio-Economic Level

Occupation	Classification into Male, Fe- male or Neutral	Preschool		Grade 2		Grade 5		Total Subjects Choosing
		Upper	Lower	Upper	Lower	Upper	Lower	
1. Pom-Pom Girl	F	1						1
2. Sew Things	F	1						1
3. Teacher	F		1	3	1	4	2	11
4. Ballerina	F		1					1
5. Cook	F		1		1		1	3
6. Nurse	F			2	2	1		5
7. Telephone Operator	F			1				1
8. Horse Rider	M			1				1
9. Doctor	M			1				1
10. Secretary	F				1	2	1	4
11. Interior Designer	N					1		1
12. Musician	N					1		1
13. Stewardess	F						1	1
14. Lion Tamer	M						1	1
15. Ticket Taker	N						1	1
Don't Know	-	8	7	2	5	1	3	26
Totals		10	10	10	10	10	10	60

at the lower level schools named 14. The difference of only 2 by both sexes is probably too small to suggest a trend on the variable of socio-economic level.

Table 9

Number of Different Occupations Named As  
Second-Choice Aspirations By Girls

Grade Level	Socio-Economic Level		Total*	Don't Know
	Upper	Lower		
Preschool	2	3	5	15
Grade 2	5	4	7	7
Grade 5	5	6	<u>9</u>	<u>4</u>
Total			15	26

\*Totals reflect overlap in responses made by respondents at the two socio-economic levels.

Table 10

Comparisons of the Numbers of Different Occupations  
Named As Second-Choice Aspirations By Children  
Attending Two Socio-Economic Level Schools

Sex of Respondents	Socio-Economic Level		Total Number of Occupations Named*
	Upper	Lower	
Girls	10	8	15
Boys	12	14	20

\*Totals reflect overlap in responses by respondents from the two socio-economic levels.

The reported findings can be used to answer the first three questions posed for the study. Boys and girls were found to differ in

the number (variety) of occupations named as aspirations, with boys naming a greater number of different occupations in both first and second choices.

The second question dealt with differences in occupations stated as aspirations on the variable of grade level of respondents. For both boys and for girls the trend was for the number of occupations named as aspirations to increase with the age level of the children.

Findings did not indicate any major trends in differences on the variable of socio-economic level of respondents, which was the variable considered by the third question of the study.

The first choices that children named as vocational aspirations were further analyzed in terms of sex-typing. Chi-square was used to test for independence of the variables of sex, grade level, and socio-economic level of respondents on sex-typing of occupations named as aspirations.

Occupations named as aspirations were classified into categories of traditionally male, traditionally female, and neutral. The classifications concurred with the ratings made by the raters when occupations were categorized for the slide series. The occupational classifications are included in the frequency distributions reported in Tables 1 and 3.

The first null hypothesis of the study was as follows: sex-typing of children's vocational aspirations is independent of the sex of the respondents. Table 11 reports the Chi-square contingency table which indicates  $\chi^2 = 54.42$ ,  $p < .001$ . Boys chose traditional male occupations as aspirations almost exclusively. Only 1 boy named a traditionally female occupation, and only 3 named occupations classified as neutral. Half the girls named traditional female occupations, but girls also named 14



traditional male occupations as choices and 9 occupations classified as neutral. Based on these findings, the null hypothesis was rejected.

Table 11

Contingency Table Showing Relationship of Sex-Typing in First-Choice Aspirations and Sex of Respondents

Sex-Typed Classification Of Occupation	Selections by Sex	
	Boys	Girls
Male	53	14
Female	1	30
Neutral	3	9
Don't Know	3	7
	N = 60	N = 60

$$\chi^2 = 54.42, p < .001$$

Table 12 indicates that there is no significant relationship between grade level and sex-typing in named aspirations. The null hypothesis that sex-typing of children's vocational aspirations is independent of the grade level of the respondents was retained. The differences between responses of children at different grade levels were not significant ( $\chi^2 = 1.39, p < .80$ ).

Table 12

Contingency Table Showing Relationship of Sex-Typing in First-Choice Aspirations and Grade Level of Respondents

Sex-Typed Classification Of Occupation	Selections by Grade Level		
	Preschool	Grade 2	Grade 5
Male	18	24	25
Female	11	11	10
Neutral	2	5	4
	N = 31*	N = 40	N = 39*
	$\chi^2 = 1.39, p < .80$		

\*Totals do not equal 40 because of "don't know" responses.

The third hypothesis was that sex-typing of children's vocational aspirations is independent of the socio-economic level of the respondents. Table 13 indicates that the hypothesis was retained. More lower socio-economic level respondents did choose traditional male occupations as choices. However, differences were not significant, as indicated by the findings ( $\chi^2 = 4.64, p < .20$ ).

Responses to the thirty slide-tape presentation questions, "Who could do the work of a \_\_\_\_\_?" were analyzed by sex, grade level, and socio-economic level of the respondents to test the final three null hypotheses. The number of times each child responded with man, woman, both, and don't know was calculated. Then the responses could be added to test the hypotheses.

Table 13

Contingency Table Showing Relationship of Sex-Typing in First-Choice Aspirations and Socio-Economic Level of Respondents

Sex-Typed Classification Of Occupation	Socio-Economic Level	
	Upper	Lower
Male	29	38
Female	16	15
Neutral	9	3
Don't Know	6	4
	N = 60	N = 60
	$\chi^2 = 4.64, p < .20$	

Table 14 is the contingency table used to test the null hypothesis that sex role expectations in children's perceptions of occupations are independent of the sex of the respondents.

Findings reject the null hypothesis at the .01 level of significance ( $\chi^2 = 12.62$ ), indicating that there is a relationship between sex role expectations in perceptions of occupations and the sex of the respondents. A greater number of girls than boys chose "woman" as a choice for who could do the work in the occupations depicted, while a greater number of boys than girls chose "man" as someone who could do that work. Both boys and girls chose "man" more frequently than even the girls chose "woman." Boys chose "neutral" more frequently than did girls for

the occupations shown. Six more girls than boys responded with "don't know." Results indicate that a majority of both boys and girls perceived the thirty occupations as neutral places where both a man and a woman could work. When occupations were not considered as places where both a man and a woman could work, the occupations were more often perceived as for men, as indicated by the data that "man" was chosen 955 times compared with the response of "woman" made 737 times.

Table 14

Contingency Table Showing Relationship of Sex Role  
Perceptions of 30 Occupations and  
Sex of Respondents

Total Choices of  
Who Could Do the  
Work in 30 Occupa-  
tions

Sex of Respondents

Boys

Girls

Woman

334

403

Man

506

449

Both

956

938

Don't Know

4

10

N = 1800

N = 1800

$\chi^2 = 12.62, p < .01$

The null hypothesis that sex role expectations in perceptions of occupations is independent of the grade level of the respondents was also

rejected by the findings of this study. Table 15 indicates the relationship of the choices made by children at the three grade levels ( $\chi^2 = 146.52, p < .001$ ).

Table 15

Contingency Table Showing Relationship of Sex Role  
Perceptions of 30 Occupations and  
Grade Level of Respondents

Total Choices of  
Who Could Do the  
Work in 30 Occupa-  
tions

Grade Level of Respondents

Preschool      Grade 2      Grade 5

Woman

307

217

213

Man

410

320

225

Both

470

663

761

N = 1187\*

N = 1200

N = 1199\*

$\chi^2 = 146.52, p < .001$

\*Totals for the three grade levels do not total 1200 each because of "don't know" responses of 13 preschoolers and 1 fifth grader. These were dropped from the table.

Results indicate that as age level increased, choices became less sex-typed, and occupations were more likely to be viewed as places where both a woman and a man could work. Preschool children chose "woman" and "man" more frequently as responses than respondents at the other two grade levels. With increasing grade level, children chose "both" with greater frequency. A majority of the responses did favor "both" (1894).

with "man" receiving a total of 955 responses and "woman" 737 responses.

The last null hypothesis of the study was that sex role expectations in children's perceptions of occupations are independent of the socio-economic level of the respondents. Table 16 indicates that the differences on the variable of socio-economic level are significant ( $\chi^2 = 9.36$ ,  $p < .05$ ), thus rejecting the null hypothesis.

Table 16

Contingency Table Showing Relationship of Sex Role  
Perceptions of 30 Occupations and Socio-  
Economic Level of Respondents

Total Choices of  
Who Could Do the  
Work in 30 Occupa-  
tions

Socio-Economic Level

Upper

Lower

Woman

339

398

Man

467

488

Both

985

909

Don't Know

9

5

N = 1800

N = 1800

$\chi^2 = 9.36$ ,  $p < .05$

A greater number of children attending the lower socio-economic level schools than children attending upper socio-economic level schools chose "man" and "woman" as responses, indicating greater sex-typing in

sex role perceptions of occupations. A greater number of upper level children chose "both" as a response, but "both" was chosen by a majority of children at each of the two socio-economic levels.

#### SUMMARY OF FINDINGS

The first three questions of the study compared the number (variety) of occupations named as aspirations on the variables of sex, grade level, and socio-economic status of respondents. Findings were reported on frequency distributions for boys and for girls. While differences were not large, the number (variety) of occupations named by children as aspirations did differ on the variables of sex and grade levels. Boys named a greater number of occupations than girls in both first and second choices. As grade level increased, the number of first and second-choice occupations named as aspirations also increased.

Findings did not reveal differences on the variable of socio-economic level for boys and only small variations for girls.

Further analysis of the stated aspirations of children rejected the first null hypothesis of the study--that sex-typing of children's vocational aspirations is independent of the sex of the respondents. Boys chose a higher number of sex-typed occupations, excluded women from occupations more than girls did, and chose fewer "neutral" occupations as aspirations. Girls' choices also reflected sex-typing but to a seemingly lesser degree.

Findings did not show significant differences on the variables of grade level and socio-economic level. Therefore, the two null hypotheses postulating independence of these variables in sex-typing

of children's vocational aspirations were retained.

Analysis of the responses to the slide-tape series of thirty occupational settings rejected the null hypotheses that sex role expectations in children's perceptions of occupations were independent of the variables of sex, grade level, and socio-economic level. A majority of both sexes chose "both" as being able to do the work in the occupations, but "man" was chosen more frequently than "woman" as someone who could do the work in the occupations shown. With increasing age, a greater number of children selected "both" as a choice, revealing less sex-typing in expectations of who could do the work. Children attending the lower socio-economic level schools revealed more sex-typing in perceptions of occupations than their upper socio-economic level counterparts.



## Chapter 5

### DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

#### The Problem

The purpose of this study was to determine whether children held sex role expectations in their stated vocational aspirations and in their perceptions of occupations. In addition, the differences in responses between boys and girls; between preschool, lower elementary, and upper elementary school children; and between children attending schools in two neighborhoods--one predominantly lower to lower-middle class, the other middle to upper-middle class--were calculated and analyzed.

#### Discussion

Sex-typing in vocational aspirations of young children was indicated in both the number (variety) of occupations named as aspirations by boys and girls in the study as well as in the way these occupations conformed to traditional sex roles. However, comparisons of the findings of this study with previous findings suggest that a lessening in sex-typing of aspirations may be occurring.

Studies by Looft,<sup>1</sup> Hewitt,<sup>2</sup> Hahn,<sup>3</sup> and Swick and Carlton<sup>4</sup> all

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<sup>1</sup>W. R. Looft, "Sex Differences in the Expression of Vocational Aspirations by Elementary School Children," Developmental Psychology, V (1971), 366.

<sup>2</sup>Lynn Stewart Hewitt, "Age and Sex Differences in the Vocational Aspirations of Elementary School Children," Journal of Social Psychology, XCVI (1975), 175.

<sup>3</sup>Carol Hahn, "The Me I Want to Be: Students' Aspirations in the Seventies," Social Education, XXXVIII (April, 1974), 341.

<sup>4</sup>Kevin J. Swick and Mary Ellen Carlton, "An Examination of Occupational Interests of Kindergarten Children: Implications for Curriculum Development," Reading Improvement, XI (Spring, 1974), 59-60.

reported that boys nominated a greater number of occupations as aspirations than girls did. Findings of the present study show that the sixty boys named 29 different occupations with policeman (9), fireman (7), truck driver (6), and John Deere Worker (4) as most popular choices. The sixty girls named 25 different occupations with most frequently named first-choice aspirations being nurse (14), veterinarian (5), horse trainer (4), teacher (4), and mother (3).

Children named a wide diversity of occupations as aspirations, indicative of the awareness and accommodation stages of career development. The number of different occupations named by children at each grade level increased with each higher grade level. With increasing age, both boys and girls perceived their job perspectives as broadening. This is a contrasting finding to that of Hewitt, who found that girls chose only a few vocational alternatives, primarily nursing and teaching.<sup>1</sup>

Including preschool children in the sample allowed comparison with other studies of kindergarten and lower elementary children. The 40 preschool boys named 8 occupations as aspirations, while the 40 girls named 9. Swick and Carlton reported 24 kindergarten boys nominated 16 occupations, and 24 kindergarten girls named 9. Looft's study reported first and second-grade boys named 18, girls 8. Comparisons suggest that the disparity between number of different occupations named by boys and girls occurs sometime between preschool and kindergarten or first grade. Preschool boys' choices centered around community workers, who are readily observable as role models. Girls' choices also reflected

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<sup>1</sup>Hewitt, p. 176.

observable role models (nurse, mother), as well as fantasy models (ballerina, Wonderwoman, cowgirl).

Neither the lower nor upper-elementary children (grades two and five) in the present study named as many different occupations as aspirations as other studies have reported. No important differences were found in the number of different occupations named as aspirations by children of the middle to upper-middle class compared with children of the lower to lower-middle class. Boys in each of the two classes nominated 18 occupations, while upper to upper-middle class girls named 16 and lower to lower-middle class girls, 13.

Second choices of occupational aspirations revealed that nearly half of both boys and girls responded "I don't know." While this might have been expected at the preschool level, the fact that 10 fifth graders also made this choice might indicate that children may not be aware of a number of vocational choices. Aspirations appear to be fairly well crystallized into one choice. Boys named a total of 20 different occupations as second choices, with policeman (6), truck driver (5), and John Deere Worker (4) as popular choices. Girls named 15 second-choice occupational aspirations with teacher (11), nurse (5), and secretary (4) most frequently chosen.

A significant relationship was found between sex-typing of first-choice occupational aspirations and the sex of the respondents. Of 60 boys, 53 chose "traditional male" occupations, 3 "neutral" occupations, and only 1 a "female" occupation. This compares to the 60 girls' choices of 30 "female," 14 "male," and 9 "neutral" occupations. These findings

support Schlossberg and Goodman's<sup>1</sup> conclusion that children chose jobs for themselves that fall within the usual stereotypes. However, girls excluded themselves from "men's" jobs to a lesser degree than boys excluded themselves from "women's" jobs.

No significant differences in sex-typing of aspirations were found on the variables of grade level and socio-economic status of the respondents.

The second part of the study investigated sex role expectations in children's perceptions of occupations. Significant differences were found on the variables of sex, grade level and socio-economic status of respondents. Approximately half of the responses to the thirty occupations depicted in the slide-tape series indicated that occupations were seen as places where both a man and a woman could work. The results did indicate, however, that both boys and girls were more ready to exclude women from jobs than to exclude men from jobs. Girls, more than boys, did perceive women as being able to do the work in the occupations. These findings concur with those of Schlossberg and Goodman,<sup>2</sup> who also reported no appreciable increase in stereotyping from kindergarten to sixth grade.

In contrast, the present study found a decrease in the degree of stereotyping as the grade level of the respondents increased. A greater number of fifth-grade students, as compared to second graders and pre-

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<sup>1</sup>Nancy Schlossberg and Jane Goodman, "A Woman's Place: Children's Sex Stereotyping of Occupations," Vocational Guidance Quarterly, XX (1972), 269.

<sup>2</sup>Schlossberg and Goodman, p. 268.

schoolers, saw both a man and a woman as being able to perform the work of the occupations, although "man" was selected more frequently than "woman."

Schlossberg and Goodman reported that sixth graders at model city schools stereotyped more than those at middle income schools.<sup>1</sup> Support for this conclusion can be made on the basis of this study. Children attending middle to upper-middle class schools showed less sex-typing in their perceptions of occupations than children attending lower to lower-middle class schools.

### Conclusions

Conclusions that can be drawn from the study can be summarized as follows:

1. Children attending preschool, second grade, and fifth grade classes have a wide diversity of occupational aspirations. The number of occupations named by children differed on the variable of sex but not on the variables of grade level and socio-economic level.

2. Since preschool boys and girls named about the same number of different occupations as aspirations and second and fifth-grade boys named a greater number than did girls, it appears that the disparity occurs sometime between preschool and second grade.

3. The high frequency of single choice aspirations may indicate that choices are fairly well crystallized or that children may not be aware of other vocational possibilities.

4. Boys reveal more sex-typing in their perceptions of occupa-

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<sup>1</sup>Schlossberg and Goodman, p. 268.

tions than do girls, though a majority of boys and girls perceive that both a man and a woman could do the work in occupations.

5. Sex-typing in perceptions of occupations appears to decrease with increasing ages of children.

6. Children from lower to lower-middle class level schools appear to perceive more traditional sex role expectations than their middle to upper-middle class counterparts in their perceptions of occupations.

7. While children may perceive both a man and a woman as workers in an occupation, they tend to choose jobs for themselves that fall within the usual stereotypes. This discrepancy between general perceptions and personalized choices seems especially characteristic of boys.

#### Implications and Recommendations

The findings of the study have implications for parents and teachers of preschool and elementary school children. Support was found for the belief that preschool years can be considered a bonafide stage in vocational development and awareness. Parents and teachers of preschool children should be sure that young children have exposure to many occupations and role models, including workers in non-traditional sex roles. Children need to learn about occupations other than community helpers. With increasing numbers of people working in technical jobs in large industries, especially in the area where the sample was drawn, children may know where their parents work but still have little understanding about what work the jobs entail. In line with labor trends, children need to be encouraged to look at other than traditionally sex-

typed occupations. This may be especially true for boys, who demonstrated even greater sex-typing in aspirations and perceptions of occupations than girls.

Career education may be having an influence on the reduction of sex role expectations in perceptions of occupations. The results of the study might reflect the effects of a cognitive career education program. The older children in the sample were less sex-typed in their responses. Children from lower socio-economic levels especially need exposure to non-traditional sex role models and opportunities. Counselors and teachers should continue to provide opportunities for children to learn about a wide variety of vocational opportunities in an environment where rapid changes are occurring in the world of work. Besides encouraging perceptions of occupations as being open to both men and women, teachers, counselors, and parents should help children personalize these non-stereotypic attitudes so that personal vocational aspirations reflect less sex-typing. Research should investigate the effects of career education on sex-typing of occupations.

Career education experiences should extend to young children and their parents. Parents could be helped to realize the importance of encouraging children to view occupations and the world of work as providing opportunities for both men and women to make meaningful contributions when they are not limited by sex role stereotypes.

Findings of the study suggest areas for further research. Replication of the study with other samples of children and with children of different grade levels and socio-economic backgrounds would add to the knowledge about sex-typing in vocational aspirations and perceptions of

occupations. Occupations other than the thirty represented in this study should be included in future investigations of sex-typing. This study used a slide-tape series to assess perceptions. Alternative means might be devised to assess sex-typing of roles and occupations, especially with preschool children, whose attention span is limited, requiring a one-to-one relationship in interviews.

Developmental trends could be studied with longitudinal data, studying children from preschool years until they reach adulthood. Further research with preschool and elementary children could clarify the question about when sex-typing of aspirations and perceptions of occupations seem to crystallize. Data measuring sex-typing in attitudes before and after efforts to combat sexism should be collected about young children, including preschoolers.

Children need more exposure to the world of work. Teachers, parents, and employers should be sensitized to realize the importance of introducing children to non-stereotypic role models and vocational opportunities at a very young age. Inquiries into the vocational development of children and adults should not neglect the aspect of sex role expectations.



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**APPENDIX A**  
**INFORMATION NOTE FOR PARENTS**

## INFORMATION NOTE FOR PARENTS

Mrs. Mary Franken, an assistant professor of home economics at UNI, is completing her doctoral program at Drake University in Counseling and Personnel Services. She has asked the cooperation of several educational facilities in our community in granting her permission to interview young children to learn about how they perceive the world of work. She has explained the nature of her research to us, and we are pleased to be included in the statistical sample. During the last part of April she and a co-interviewer will hold twenty-minute interviews, using a slide series, with some of the children from our school.

**APPENDIX B**  
**INTERVIEW PROCEDURE**

## INTERVIEW PROCEDURE

"Hi! My name is \_\_\_\_\_."

"What's your name?" (Check to make sure it is on recording sheet.)

"How old are you, \_\_\_\_\_?"

"Do you know why I have asked you to come here today? (If child appears anxious, continue ice breaking, reflect on child's feelings. When at ease, proceed.)

"I asked you to come to visit with me today because I would like you to help me. I think your teacher told you that \_\_\_\_\_ and I are here to talk with some children to learn about some of their ideas about jobs and work that grown-ups do.

"You probably have thought about the work or job you would like to do someday. What do you want to be when you grow up?" (Write down.)

"Have you another idea about what you might want to do?" (Write down.)

"Today I would like to show you some pictures of places where people work. A voice on a tape will tell you about the work that would be done by a person who might work in the picture. Some of these jobs have hard names. But if you will listen to what the tape tells you about the job, I think you will understand what a person on that job would do. The tape will ask you a question after telling you about the job. It will ask you who could do the work of that job--a man, a woman, or both a woman and a man?"

"Let's look at a picture and see what to do. This is a picture of a place where a ticket taker might work. As you look at the picture, think about who you think could do the work the tape tells you about. Let's listen..." (Turn on tape.)

"Ticket Taker. A ticket taker is a person who would take your ticket when you went into a game or a circus or a movie. Who could do the job of a ticket taker--a woman, a man, or both a woman and a man?"

"There aren't any right or wrong answers--I only want to know who you think could do the work in that job. If you think only a woman could do that work, you would say 'woman.' If you think only a man could do that work, you would say 'man.' If you think both a woman and a man could do the work of a ticket taker, you would say 'both.' Try to decide if you think a man or a woman or both a man and a woman could do the work that the picture and voice tell you about. But if you can't decide, you can tell me that you don't know, and we'll go on to the next picture. Do you have any questions?"

"Let's listen to the tape again and this time you can give me your answer." (Play tape and child responds.)

"Do you have any questions before we go on to more pictures?" (Pause)

"Okay, let's go on." (Go through the 30 occupational slides with accompanying tape, stopping the tape while writing down child's response to each description. Then say:

"That was the last picture. Thank you very much for your help,  
\_\_\_\_\_."

APPENDIX C

PROCEDURES FOR SELECTING THE 30 OCCUPATIONS

REPRESENTED IN THE STUDY

## DIRECTIONS TO JUDGES CATEGORIZING OCCUPATIONS

Thank you for agreeing to help me as I work on my dissertation instrument. Sex roles are rapidly changing, and for my study I want to investigate the degree to which children sex-type occupations. Therefore, I would like to categorize occupations into three categories--those considered traditionally for men, those considered traditionally for women, and those which are more neutral (less sex-typed).

I have selected sixty occupations from the U.S. Office of Education's fifteen occupational clusters that preschool and elementary school children could probably understand when shown a picture of the setting with accompanying explanatory audio tape.

Please sort the sixty cards into the three categories--occupations considered to be traditionally female, male, and neutral. You may select an occupation as neutral, not because equal number of males and females have been employed in that occupation, but on the basis that both men and women have likely been employed in that occupation or because the occupation is less strongly sex-typed.

Please sort the cards, which are in alphabetical order, into the three categories. When you have finalized your selections, please write the numbers of the cards you put into each category on the enclosed recording sheet. Then place this sheet in the envelope and seal it so that the respondents will be anonymous.



Table 17

Sixty Occupations from the U.S. Office of Education Clusters  
Rated by 10 Judges into Categories of Traditionally Male,  
Traditionally Female, and Neutral

- 
- |                                   |                             |
|-----------------------------------|-----------------------------|
| 1. Air Analyst                    | 31. Meteorologist           |
| 2. Air Traffic Controller         | 32. Motel Clerk             |
| 3. Artist                         | 33. Nurse                   |
| 4. Attorney                       | 34. Oceanographer           |
| 5. Bakery Worker                  | 35. Organist                |
| 6. Bookkeeper                     | 36. Parking Meter Attendant |
| 7. Bulldozer Operator             | 37. Performer               |
| 8. Camp Counselor                 | 38. Pet Shop Owner          |
| 9. Carpenter                      | 39. Physical Therapist      |
| 10. Carpet Installer              | 40. Pilot                   |
| 11. Cartoonist                    | 41. Politician              |
| 12. Coach                         | 42. Postal Clerk            |
| 13. Computer Programmer           | 43. Professional Athlete    |
| 14. Cosmotologist                 | 44. Proofreader             |
| 15. Dental Assistant              | 45. Receptionist            |
| 16. Dietician                     | 46. Reservation Agent       |
| 17. Display Person/Window Dresser | 47. Salesperson             |
| 18. Doctor                        | 48. Secretary               |
| 19. Elementary School Teacher     | 49. Sewing Machine Operator |
| 20. Farm Owner/Manager            | 50. Short Order Cook        |
| 21. Fishing Boat Operator         | 51. Snow Remover            |
| 22. Floral Arranger               | 52. Social Worker           |
| 23. Forester                      | 53. Telephone Operator      |
| 24. Grocery Cashier               | 54. Television Announcer    |
| 25. Hotel Manager                 | 55. Ticket Taker            |
| 26. Housekeeper                   | 56. Travel Agent            |
| 27. Interior Designer             | 57. Tropical Fish Dealer    |
| 28. Librarian                     | 58. Truck Driver            |
| 29. Machine Tool Operator         | 59. Upholsterer             |
| 30. Mail Carrier                  | 60. Wedding Consultant      |
-

Table 18

Occupations Selected for the Study from the 15 U.S. Office of Education Career  
Clusters with Proportion of Rater Agreement for Assignment to  
Male, Female, or Neutral Category by 10 Raters

Career Cluster	Traditionally Male Occupations	Traditionally Female Occupations	Neutral Occupations
1. Agribusiness- Natural Resources	Farmstead Owner-Manager 1.00	Floral Arranger .80	
2. Communication Media	Mail Carrier .90	Telephone Operator 1.00	
3. Construction	Carpenter 1.00		Interior Designer .70
4. Consumer- Homemaker		Dietician 1.00	Short Order Cook .80
5. Environment	Meteorologist 1.00		Camp Counselor .90
6. Fine Arts- Humanities		Librarian .90	Artist .90
7. Health	Doctor .80	Nurse 1.00	
8. Manufacturing	Machine Tool Operator 1.00	Sewing Machine Operator 1.00	
9. Marine Science	Fishing Boat Operator 1.00		Tropical Fish Dealer .80

Table 18 (Continued)

Career Cluster	Traditionally Male Occupations	Traditionally Female Occupations	Neutral Occupations
10. Marketing and Distribution		Grocery Store Cashier .90	Salesperson .90
11. Office		Secretary 1.00	Computer Programmer .70
12. Personal Services		Cosmotologist 1.00	Pet Shop Manager .70
13. Public Service	Politician .90	Elementary Teacher .90	
14. Recreation and Hospitality	Coach .80		Motel Clerk .80
15. Transportation	Truck Driver 1.00		Travel Agent 1.00

**APPENDIX D**  
**SCRIPT OF THE SLIDE-TAPE PRESENTATION**

## TAPE SCRIPT

Sample Description to Accompany Sample Slide (recorded twice):

Ticket Taker. A ticket taker is a person who would take your ticket when you went into a game or a circus or a movie. Who could do the job of a ticket taker--a woman, a man, or both a woman and a man?

Descriptions to Accompany Slides 1-30:

1. Artist. This picture shows a drawing board where an artist could work. An artist could work in different ways, like drawing, painting, or working with pictures in a magazine or book. Who could do the work of an artist--a woman, a man, or both a woman and a man?
2. Camp Counselor. A camp counselor helps children who go to summer camp. A counselor swims and plays with campers and helps them with any problems they have. A camp counselor works outdoors a lot of the time. Who could do the work of a camp counselor--a man, a woman, or both a man and a woman?
3. Carpenter. A carpenter uses tools like a hammer and a saw to put up a building like the one you see in this picture. A carpenter does a lot of work with wood and nails. Who could do the work of a carpenter--a man, a woman, or both a man and a woman?
4. Coach. A coach helps people who play sports and games. This picture shows a locker room where players leave their clothes when they are in the gym or outside. A coach may help one person at a time or a team play a game better. Who could do the work of a coach--a man, a woman, or both a man and a woman?
5. Computer Programmer. You may have heard people talk about computers. Computers are special machines like the one you see here. A computer programmer is a worker who is needed to plan the way information is put into the computer so the numbers come out making sense. Who could do the work of a computer programmer--a man, a woman, or both a man and a woman?
6. Cosmotologist. A cosmotologist is also called a beauty operator or hair dresser. Beauty operators work in a beauty shop. They wash, cut, and comb hair, and give permanents. Who could do the work of a cosmotologist or beauty operator--a woman, a man, or both a woman and a man?
7. Dietician. A dietician is a person who knows the kinds of foods that people need to eat to be healthy and strong. Dieticians plan the kinds of food that cooks make for hot lunch or for people on

- a special diet. A dietician has planned the food you see in this picture. Who could do the work of a dietician--a woman, a man, or both a woman and a man?
8. Doctor. A doctor takes care of people when they are sick or hurt. A doctor also uses a stethoscope and a thermometer when giving check-ups to make sure people are in good health. Who could do the work of a doctor--a man, a woman, or both a man and a woman?
  9. Elementary Teacher. A school room is where an elementary teacher helps boys and girls learn to read, write, do their numbers and learn about people and the world they live in. Who could do the work of an elementary teacher--a man, a woman, or both a man and a woman?
  10. Farm Owner/Manager. A farm owner's job is to plan how to use land and money and machinery so that they can grow crops and raise animals. This gives people the food they buy in stores. Who could do the work of a farm owner/manager--a man, a woman, or both a man and a woman?
  11. Fishing Boat Operator. Fishing is another way people get food. A person who runs a fishing boat takes the ship or boat out to sea and uses nets or traps to catch fish and lobsters to sell to stores and restaurants. Who could do the work of a fishing boat operator --a man, a woman, or both a man and a woman?
  12. Floral Arranger. A flower shop is where a floral arranger works to make pretty bouquets and corsages of flowers. People order flowers to send people when they are sick and for weddings or special times during the year. Who could do the work of a floral arranger--a woman, a man, or both a woman and a man?
  13. Grocery Store Cashier. Using a cash register is the job of a grocery store cashier. The cashier punches the amount each thing costs, gives the right change to the customer, and sacks up the groceries. Who could do the work of a grocery store cashier--a woman, a man, or both a woman and a man?
  14. Interior Designer. This room shows pieces of carpet and material that an interior designer would use when planning the colors and furniture and curtains for the inside of a house or building. Interior designers work with people to help them think about what they like and need in the rooms where they live or work. Then they find the furniture, carpet, and pictures that make the room look nice. Who could do the work of an interior designer--a man, a woman, or both a man and a woman?
  15. Librarian. A librarian may work in a city library, a school library, or a special place like a law library. Choosing books and materials for the library and helping people find books and

information they need are important work of a librarian. Who could do the work of a librarian--a man, a woman, or both a man and a woman?

16. Machine Tool Operator. This picture shows a machine used by a machine tool operator. Metal parts for engines and machines are made on a lathe, a drill press, or a grinding machine. Who could do the work of a machine tool operator--a woman, a man, or both a woman and a man?
17. Mail Carrier. A mail carrier drives a small truck or walks a certain route to deliver mail and pick up mail. Carriers first sort the mail at the post office and then go on their way to homes and business places. Who could do the work of a mail carrier--a woman, a man, or both a woman and a man?
18. Meteorologist. A meteorologist uses instruments like the ones here to study the weather. The air, the wind, and how much water is in the air are measured to help tell the kind of weather to expect. Then the weather report is given on the radio and television. Who could do the work of a meteorologist or weather forecaster--a woman, a man, or both a woman and a man?
19. Motel Clerk. A motel clerk's job is to rent rooms to people when they come to stay at a motel. A motel clerk makes reservations for people who call ahead to save them a room. Then the motel clerk checks them in and gives them a key when they get there. Who could do the work of a motel clerk--a man, a woman, or both a man and a woman?
20. Nurse. This picture shows a nursing desk at a hospital. Nurses also work in a doctor's office or even a school. A nurse follows a doctor's orders by taking care of patients, giving them medicines they need, and watching how they get along when they are sick. Who could do the work of a nurse--a woman, a man, or both a woman and a man?
21. Pet Store Manager. Many kinds of animals are found in pet stores. The manager of a pet store chooses the many kinds of animals and pet supplies sold in the store. A manager may hire other workers to take care of the pets and to sell the things in the store. Who could do the work of a pet store manager--a woman, a man, or both a woman and a man?
22. Politician. A politician is a person who runs in an election to work in the city or state or United States government. State politicians work in the State Capitol Building. Here at the capitol they write laws, vote on laws, make speeches, and get letters from the people who voted for them. Who could do the work of a politician--a woman, a man, or both a woman and a man?

23. Salesperson. A salesperson may work in a store selling clothes, insurance, furniture, cars, or many other things. A salesworker should try to be helpful to customers. Who could do the work of a salesperson--a woman, a man, or both a woman and a man?
24. Secretary. Secretaries work in offices, and they type letters and reports. They use office machines, keep papers filed, and talk to the people who call or come into the office. This picture shows a secretary's desk, typewriter, and places for filing things. Who could do the work of a secretary--a man, a woman, or both a man and a woman?
25. Sewing Machine Operator. A sewing machine operator uses a sewing machine that is heavier and runs faster than a sewing machine found in a home. Sewing machine operators sew clothes, curtains, and many other things people buy in a store. Who could do the work of a sewing machine operator--a man, a woman, or both a man and a woman?
26. Short Order Cook. This is a large kitchen where a short order cook makes sandwiches and meals that people order in a restaurant. A cook makes the food so that it looks and tastes good. Who could do the work of a short order cook--a woman, a man, or both a woman and a man?
27. Telephone Operator. A telephone operator works at a place like you see here to help people with their telephone calls. The operator may help a person make a call, find a number, or tell a caller how much a call costs. Who could do the work of a telephone operator--a man, a woman, or both a man and a woman?
28. Travel Agent. A travel agent helps people learn about places to visit and ways to get there. A travel agent may help a person plan a vacation or a trip and make the reservations for a plane or train as well as for a place to stay. Who could do the work of a travel agent--a woman, a man, or both a woman and a man?
29. Tropical Fish Dealer. Tropical fish dealers raise and sell the interesting tropical fish people buy for their aquariums. Tropical fish dealers may have their business in their homes or in special shops. They also sell fish food and tanks needed to raise tropical fish. Who could do the work of a tropical fish dealer--a man, a woman, or both a man and a woman?
30. Truck Driver. Trucks carry many things all over the country. A truck driver is responsible for whatever is in the truck during the trip to where it will be delivered. Whether the truck is a large one or a smaller one, a truck driver must be a very good driver. Who could do the work of a truck driver--a woman, a man, or both a woman and a man?